

Chemical Analysis Report

NW-DIST-2021-03-05-02

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Pensacola Run**
Request ID: **RQ-2021-03-01-60**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

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Certified by: Colin Wright, Program Administrator

Date Certified: 24-MAR-2021 11:50

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Jones Creek upstream of N Navy Blvd

Collection Date/Time: 03/04/2021 09:30

Field ID: G4NW0429

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229655	EPA 8270E	Aldrin	0.80	U	ng/L	P394634	
		Dieldrin	0.43	U	ng/L	P394634	
		Alpha-BHC	2.1	U	ng/L	P394634	
		Kepone**	5.9	U	ng/L	P394634	
		Alpha-Chlordane	1.1	U	ng/L	P394634	
		Beta-BHC	8.6	U	ng/L	P394634	
		Beta-Cyfluthrin**	16	U	ng/L	P394634	
		Bifenthrin**	4.3	U	ng/L	P394634	
		Delta-BHC	8.6	U	ng/L	P394634	
		Gamma-BHC	8.6	U	ng/L	P394634	
		Carbophenothion	11	U	ng/L	P394634	RPD
		Chlorothalonil	2.1	U	ng/L	P394634	
		Cis-Nonachlor**	1.1	U	ng/L	P394634	
		Cypermethrin	21	U	ng/L	P394634	
		Dacthal**	1.1	U	ng/L	P394634	
		DDD-p,p'	5.4	U	ng/L	P394634	
		DDE-p,p'	5.4	U	ng/L	P394634	
		DDT-p,p'	6.4	U	ng/L	P394634	
		Deltamethrin**	21	U	ng/L	P394634	
		Dicofol	32	U	ng/L	P394634	
		Endosulfan I	4.3	U	ng/L	P394634	
		Endosulfan II	4.3	U	ng/L	P394634	
		Endosulfan Sulfate	2.1	U	ng/L	P394634	
		Endrin	2.1	U	ng/L	P394634	
		Endrin Aldehyde	2.1	U	ng/L	P394634	
		Endrin Ketone	2.1	U	ng/L	P394634	
		Ethalfuralin**	3.2	U	ng/L	P394634	
		Gamma-Chlordane	1.1	U	ng/L	P394634	
		Dichlobenil**	2.1	U	ng/L	P394634	
		Esfenvalerate**	21	U	ng/L	P394634	
		Fenpropathrin**	11	U	ng/L	P394634	
		Heptachlor	1.6	U	ng/L	P394634	
		Heptachlor Epoxide	2.1	U	ng/L	P394634	
		Hexachlorobenzene	2.1	U	ng/L	P394634	
		Lambda-Cyhalothrin**	16	U	ng/L	P394634	
		Methoxychlor	4.3	U	ng/L	P394634	
		Mirex	2.1	U	ng/L	P394634	
		MGK-264**	3.2	U	ng/L	P394634	RPD
		Permethrin	11	U	ng/L	P394634	
		Phenothrin**	32	U	ng/L	P394634	RPD
		Piperonyl Butoxide**	1.6	U	ng/L	P394634	
		Prallethrin**	27	U	ng/L	P394634	RPD
		Tau-Fluvalinate**	3.8	U	ng/L	P394634	
		Tetramethrin**	8.6	U	ng/L	P394634	

Field ID: G4NW0429

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229655	EPA 8270E	Trans-Nonachlor**	1.1	U	ng/L	P394634	
		Triclosan Methyl**	1.1	U	ng/L	P394634	
		Trifluralin	2.7	U	ng/L	P394634	
		Chlordane	5.4	U	ng/L	P394634	
		Toxaphene	32	U	ng/L	P394634	
2229662	EPA 200.7 Rev. 4.4	Barium	7.7		ug/L	P394624	
		Calcium	5.77		mg/L	P394624	
		Iron	390		ug/L	P394624	
		Magnesium	0.91		mg/L	P394624	
		Manganese	8.0		ug/L	P394624	
		Potassium	0.45	I	mg/L	P394624	
		Sodium	7.4		mg/L	P394624	
		Zinc	7.0	I	ug/L	P394624	
		Aluminum	380		ug/L	P394624	
		Antimony	0.094	I	ug/L	P394624	
	EPA 200.8 Rev. 5.4	Arsenic	0.62		ug/L	P394624	
		Beryllium	0.014	I	ug/L	P394624	
		Cadmium	0.020	U	ug/L	P394624	
		Chromium	0.47	I	ug/L	P394624	
		Copper	0.63	I	ug/L	P394624	
		Lead	0.74		ug/L	P394624	
		Nickel	0.50	U	ug/L	P394624	
		Selenium	0.21	I	ug/L	P394624	
		Silver	0.010	U	ug/L	P394624	
		Thallium	0.10	U	ug/L	P394624	
	SM 2340B	Hardness	18.2		mg/L	P394624	

Ref. Method and Comment:
EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 03/11/2021.

Sample Location: Bayou Marcus Creek Upstream of Mobile Hwy Bridge **Collection Date/Time: 03/04/2021 09:55**

Field ID: G5NW0161

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229628	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P394574	
	EPA 300.0 Rev. 2.1	Chloride	8.2		mg Cl/L	P394883	
		Sulfate	5.4		mg SO4/L	P394885	
	SM 2120 B-2011	Color (true)	35		PCU	P394581	
	SM 2320 B-2011	Total Alkalinity	17		mg CaCO3/L	P394734	
	SM 2540 C-2011	TDS	46		mg/L	P394831	
	SM 2540 D-2011	TSS	3	I	mg/L	P394836	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P394739	
2229629	EPA 350.1 Rev. 2.0	Ammonia-N	0.036		mg N/L	P394633	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P394786	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.48		mg N/L	P394712	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P394819	
	SM 5310 B-2011	Organic Carbon	3.0		mg C/L	P395113	
2229630	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P394571	
2229653	EPA 8270E	Aldrin	0.79	U	ng/L	P394634	
		Dieldrin	0.87	I	ng/L	P394634	
		Alpha-BHC	2.1	U	ng/L	P394634	
		Kepone**	5.8	U	ng/L	P394634	
		Alpha-Chlordane	1.1	U	ng/L	P394634	
		Beta-BHC	8.5	U	ng/L	P394634	
		Beta-Cyfluthrin**	16	U	ng/L	P394634	
		Bifenthrin**	4.2	U	ng/L	P394634	
		Delta-BHC	8.5	U	ng/L	P394634	
		Gamma-BHC	8.5	U	ng/L	P394634	
		Carbophenothion	11	U	ng/L	P394634	RPD
		Chlorothalonil	2.1	U	ng/L	P394634	
		Cis-Nonachlor**	1.1	U	ng/L	P394634	
		Cypermethrin	21	U	ng/L	P394634	
		Dacthal**	1.1	U	ng/L	P394634	
		DDD-p,p'	5.3	U	ng/L	P394634	
		DDE-p,p'	5.3	U	ng/L	P394634	
		DDT-p,p'	6.3	U	ng/L	P394634	
		Deltamethrin**	21	U	ng/L	P394634	
		Dicofol	32	U	ng/L	P394634	
		Endosulfan I	4.2	U	ng/L	P394634	
		Endosulfan II	4.2	U	ng/L	P394634	
		Endosulfan Sulfate	2.1	U	ng/L	P394634	
		Endrin	2.1	U	ng/L	P394634	
		Endrin Aldehyde	2.1	U	ng/L	P394634	
		Endrin Ketone	2.1	U	ng/L	P394634	
		Ethalfuralin**	3.2	U	ng/L	P394634	
		Gamma-Chlordane	1.1	U	ng/L	P394634	

Field ID: G5NW0161

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229653	EPA 8270E	Dichlobenil**	2.1	U	ng/L	P394634	
		Esfenvalerate**	21	U	ng/L	P394634	
		Fenpropathrin**	11	U	ng/L	P394634	
		Heptachlor	1.6	U	ng/L	P394634	
		Heptachlor Epoxide	2.1	U	ng/L	P394634	
		Hexachlorobenzene	2.1	U	ng/L	P394634	
		Lambda-Cyhalothrin**	16	U	ng/L	P394634	
		Methoxychlor	4.2	U	ng/L	P394634	
		Mirex	2.1	U	ng/L	P394634	
		MGK-264**	3.2	U	ng/L	P394634	RPD
		Permethrin	11	U	ng/L	P394634	
		Phenothrin**	32	U	ng/L	P394634	RPD
		Piperonyl Butoxide**	1.6	U	ng/L	P394634	
		Prallethrin**	26	U	ng/L	P394634	RPD
		Tau-Fluvalinate**	3.7	U	ng/L	P394634	
		Tetramethrin**	8.5	U	ng/L	P394634	
		Trans-Nonachlor**	1.1	U	ng/L	P394634	
		Triclosan Methyl**	1.1	U	ng/L	P394634	
		Trifluralin	2.6	U	ng/L	P394634	
	EPA 8276	Chlordane	6.2	I	ng/L	P394634	
		Toxaphene	32	U	ng/L	P394634	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Carpenter Creek upstream of 9th Avenue

Collection Date/Time: 03/04/2021 10:30

Field ID: G4NW0415

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229631	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P394574	
	EPA 300.0 Rev. 2.1	Chloride	8.0		mg Cl/L	P394883	
		Sulfate	5.5		mg SO4/L	P394885	
	SM 2120 B-2011	Color (true)	11		PCU	P394581	
	SM 2320 B-2011	Total Alkalinity	17		mg CaCO3/L	P394734	
	SM 2540 C-2011	TDS	49		mg/L	P394831	
	SM 2540 D-2011	TSS	2	U	mg/L	P394836	
2229632	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P394739	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P394633	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	I	mg N/L	P394786	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.0		mg N/L	P394622	
	EPA 365.1 Rev. 2.0	Total-P	0.005	I	mg P/L	P394819	
2229633	SM 5310 B-2011	Organic Carbon	1.7		mg C/L	P395113	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P394571	
2229654	EPA 8270E	Aldrin	0.82	U	ng/L	P394634	
		Dieldrin	3.7		ng/L	P394634	
		Alpha-BHC	2.2	U	ng/L	P394634	
		Kepone**	6.0	U	ng/L	P394634	
		Alpha-Chlordane	1.1	U	ng/L	P394634	
		Beta-BHC	8.7	U	ng/L	P394634	
		Beta-Cyfluthrin**	16	U	ng/L	P394634	
		Bifenthrin**	4.4	U	ng/L	P394634	
		Delta-BHC	8.7	U	ng/L	P394634	
		Gamma-BHC	8.7	U	ng/L	P394634	
		Carbophenothion	11	U	ng/L	P394634	RPD
		Chlorothalonil	2.2	U	ng/L	P394634	
		Cis-Nonachlor**	1.1	U	ng/L	P394634	
		Cypermethrin	22	U	ng/L	P394634	
		Dacthal**	1.1	U	ng/L	P394634	
		DDD-p,p'	5.4	U	ng/L	P394634	
		DDE-p,p'	5.4	U	ng/L	P394634	
		DDT-p,p'	6.5	U	ng/L	P394634	
		Deltamethrin**	22	U	ng/L	P394634	
		Dicofol	33	U	ng/L	P394634	
		Endosulfan I	4.4	U	ng/L	P394634	
		Endosulfan II	4.4	U	ng/L	P394634	
		Endosulfan Sulfate	2.2	U	ng/L	P394634	
		Endrin	2.2	U	ng/L	P394634	
		Endrin Aldehyde	2.2	U	ng/L	P394634	
		Endrin Ketone	2.2	U	ng/L	P394634	
		Ethalfuralin**	3.3	U	ng/L	P394634	
		Gamma-Chlordane	1.1	U	ng/L	P394634	
		Dichlobenil**	2.2	U	ng/L	P394634	

Field ID: G4NW0415

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229654	EPA 8270E	Esfenvalerate**	22	U	ng/L	P394634	
		Fenpropathrin**	11	U	ng/L	P394634	
		Heptachlor	1.6	U	ng/L	P394634	
		Heptachlor Epoxide	3.3	I	ng/L	P394634	
		Hexachlorobenzene	2.2	U	ng/L	P394634	
		Lambda-Cyhalothrin**	16	U	ng/L	P394634	
		Methoxychlor	4.4	U	ng/L	P394634	
		Mirex	2.2	U	ng/L	P394634	
		MGK-264**	3.3	U	ng/L	P394634	RPD
		Permethrin	11	U	ng/L	P394634	
		Phenothrin**	33	U	ng/L	P394634	RPD
		Piperonyl Butoxide**	1.6	U	ng/L	P394634	
		Prallethrin**	27	U	ng/L	P394634	RPD
		Tau-Fluvalinate**	3.8	U	ng/L	P394634	
		Tetramethrin**	8.7	U	ng/L	P394634	
		Trans-Nonachlor**	1.1	U	ng/L	P394634	
		Triclosan Methyl**	1.1	U	ng/L	P394634	
		Trifluralin	2.7	U	ng/L	P394634	
	EPA 8276	Chlordane	5.4	U	ng/L	P394634	
		Toxaphene	33	U	ng/L	P394634	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Ten Mile Creek upstream of Pine Forest Road Collection Date/Time: 03/04/2021 11:15

Field ID: G5NW0051

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229659	EPA 200.7 Rev. 4.4	Barium	9.2		ug/L	P394624	
		Calcium	4.67		mg/L	P394624	
		Iron	570		ug/L	P394624	
		Magnesium	0.97		mg/L	P394624	
		Manganese	22.6		ug/L	P394624	
		Potassium	0.71	I	mg/L	P394624	
		Sodium	5.3		mg/L	P394624	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P394624	
		Aluminum	170		ug/L	P394624	
		Antimony	0.050	U	ug/L	P394624	
		Arsenic	0.31		ug/L	P394624	
		Beryllium	0.010	U	ug/L	P394624	
		Boron**	16.2		ug/L	P394624	
		Cadmium	0.020	U	ug/L	P394624	
		Chromium	0.40	U	ug/L	P394624	
		Copper	0.41	I	ug/L	P394624	
		Lead	0.23	I	ug/L	P394624	
		Nickel	0.50	U	ug/L	P394624	
		Selenium	0.20	U	ug/L	P394624	
		Silver	0.010	U	ug/L	P394624	
		Thallium	0.10	U	ug/L	P394624	
	SM 2340B	Hardness	15.7		mg/L	P394624	

Sample Location: Ten Mile Creek above Powerlines

Collection Date/Time: 03/04/2021 11:30

Field ID: G5NW0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229660	EPA 200.7 Rev. 4.4	Barium	10.8		ug/L	P394624	
		Calcium	5.33		mg/L	P394624	
		Iron	530		ug/L	P394624	
		Magnesium	1.05		mg/L	P394624	
		Manganese	22.4		ug/L	P394624	
		Potassium	0.74	I	mg/L	P394624	
		Sodium	5.7		mg/L	P394624	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P394624	
		Aluminum	166		ug/L	P394624	
		Antimony	0.050	U	ug/L	P394624	
		Arsenic	0.32		ug/L	P394624	
		Beryllium	0.019	I	ug/L	P394624	
		Boron**	17.5		ug/L	P394624	
		Cadmium	0.020	U	ug/L	P394624	
		Chromium	0.40	U	ug/L	P394624	
		Copper	0.64	I	ug/L	P394624	
		Lead	0.26	I	ug/L	P394624	
		Nickel	0.94	I	ug/L	P394624	
		Selenium	0.20	U	ug/L	P394624	
		Silver	0.010	U	ug/L	P394624	
		Thallium	0.10	U	ug/L	P394624	
	SM 2340B	Hardness	17.6		mg/L	P394624	

Sample Location: Muscogee Creek 300m downstream of Beulah Road **Collection Date/Time: 03/04/2021 12:30**

Field ID: G4NW0529

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229661	EPA 200.7 Rev. 4.4	Barium	15.8		ug/L	P394624	
		Calcium	1.33		mg/L	P394624	
		Iron	420		ug/L	P394624	
		Magnesium	0.67		mg/L	P394624	
		Manganese	14.9		ug/L	P394624	
		Potassium	0.50	I	mg/L	P394624	
		Sodium	4.6		mg/L	P394624	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P394624	
		Aluminum	473		ug/L	P394624	
		Antimony	0.050	U	ug/L	P394624	
		Arsenic	0.22		ug/L	P394624	
		Beryllium	0.087		ug/L	P394624	
		Boron**	10.3		ug/L	P394624	
		Cadmium	0.020	U	ug/L	P394624	
		Chromium	0.56	I	ug/L	P394624	
		Copper	0.40	U	ug/L	P394624	
		Lead	0.39	I	ug/L	P394624	
		Nickel	0.57	I	ug/L	P394624	
		Selenium	0.20	U	ug/L	P394624	
		Silver	0.010	U	ug/L	P394624	
		Thallium	0.10	U	ug/L	P394624	
	SM 2340B	Hardness	6.1		mg/L	P394624	

Sample Location: Rest Area Run below Beaver Pond creek

Collection Date/Time: 03/04/2021 13:15

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229625	EPA 180.1 Rev. 2.0	Turbidity	16		NTU	P394574	
	EPA 300.0 Rev. 2.1	Chloride	6.9		mg Cl/L	P394883	
		Sulfate	3.0		mg SO4/L	P394885	
	SM 2120 B-2011	Color (true)	54	A	PCU	P394582	
	SM 2320 B-2011	Total Alkalinity	9.5		mg CaCO3/L	P394734	
	SM 2540 C-2011	TDS	45		mg/L	P394831	
	SM 2540 D-2011	TSS	2	I	mg/L	P394836	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P394739	
2229626	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P394633	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39		mg N/L	P394786	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P394622	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P394655	
	SM 5310 B-2011	Organic Carbon	6.9		mg C/L	P395113	
2229627	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P394571	
2229647	EPA 8321B	Aldicarb	0.020	U	ug/L	P394538	
		Aldicarb Sulfone	0.0020	U	ug/L	P394538	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P394538	MS
		Carbaryl	0.0020	U	ug/L	P394538	
		Carbofuran	0.0020	U	ug/L	P394538	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P394538	
		Methiocarb	0.0020	U	ug/L	P394538	
		Methomyl	0.0020	U	ug/L	P394538	
		Oxamyl	0.0020	U	ug/L	P394538	
		Propoxur	0.0020	U	ug/L	P394538	
		2,4-D	0.0020	U	ug/L	P394600	
		Acesulfame K	0.10	U	ug/L	P394640	MS
		2,4,5-T	0.0040	U	ug/L	P394600	
2229648		AMPA	0.10	U	ug/L	P394640	
		Sucralose	0.58		ug/L	P394640	
		Acetaminophen	0.019	I	ug/L	P394600	
		Acetamiprid	0.0020	U	ug/L	P394600	
		Endothall	0.25	U	ug/L	P394640	
		Glufosinate	0.10	U	ug/L	P394640	
		Glyphosate	0.10	U	ug/L	P394640	MS
		Afidopyropen	0.0020	U	ug/L	P394600	
		Bentazon	0.0025	I	ug/L	P394600	
		Benzovindiflupyr	0.0020	U	ug/L	P394600	
		Carbamazepine	9.9E-04	I	ug/L	P394600	
		Clothianidin	0.0020	U	ug/L	P394600	
		Dinotefuran	0.0020	U	ug/L	P394600	
		Diuron	0.0020	U	ug/L	P394600	
		Fenuron	0.016	U	ug/L	P394600	
		Fluridone	8.0E-04	U	ug/L	P394600	

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229648	EPA 8321B	Imazapyr	0.0040	U	ug/L	P394600	
		Hydrocodone	0.0020	U	ug/L	P394600	
		Ibuprofen	0.020	U	ug/L	P394600	
		Imidacloprid	0.011		ug/L	P394600	
		Linuron	0.0040	U	ug/L	P394600	
		Mandestrobin	0.0020	U	ug/L	P394600	
		MCP	0.0028	I	ug/L	P394600	
		Naproxen	0.0080	U	ug/L	P394600	
		Primidone	0.0040	U	ug/L	P394600	
		Pyraclostrobin	0.0020	U	ug/L	P394600	
		Thiamethoxam	0.0020	U	ug/L	P394600	
		Tolfenpyrad	0.0020	U	ug/L	P394600	
		Triclopyr	0.0040	U	ug/L	P394600	
2229651	EPA 8270E	Aldrin	4.5	U	ng/L	P394634	
		Alpha-BHC	2.2	U	ng/L	P394634	
		Alpha-Chlordane	1.1	U	ng/L	P394634	
		Beta-BHC	9.0	U	ng/L	P394634	
		Beta-Cyfluthrin**	17	U	ng/L	P394634	
		Bifenthrin**	4.5	U	ng/L	P394634	
		Delta-BHC	9.0	U	ng/L	P394634	
		Gamma-BHC	9.0	U	ng/L	P394634	
		Chlorothalonil	2.2	U	ng/L	P394634	
		Cis-Nonachlor**	1.1	U	ng/L	P394634	
		Cypermethrin	22	U	ng/L	P394634	
		Dacthal**	1.1	U	ng/L	P394634	
		DDD-p,p'	5.6	U	ng/L	P394634	
		DDE-p,p'	5.6	U	ng/L	P394634	
		DDT-p,p'	6.7	U	ng/L	P394634	
		Deltamethrin**	22	U	ng/L	P394634	
		Dicofol	34	U	ng/L	P394634	
		Dieldrin	4.5	U	ng/L	P394634	
		Endosulfan I	4.5	U	ng/L	P394634	
		Endosulfan II	4.5	U	ng/L	P394634	
		Endosulfan Sulfate	2.2	U	ng/L	P394634	
		Endrin	2.2	U	ng/L	P394634	
		Endrin Aldehyde	2.2	U	ng/L	P394634	
		Endrin Ketone	2.2	U	ng/L	P394634	
		Ethalfuralin**	3.4	U	ng/L	P394634	
		Gamma-Chlordane	1.1	U	ng/L	P394634	
		Dichlobenil**	2.2	U	ng/L	P394634	
		Esfenvalerate**	22	U	ng/L	P394634	
		Fenprothrin**	11	U	ng/L	P394634	
		Heptachlor	1.7	U	ng/L	P394634	
		Heptachlor Epoxide	2.2	U	ng/L	P394634	
		Hexachlorobenzene	2.2	U	ng/L	P394634	

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229651	EPA 8270E	Lambda-Cyhalothrin**	17	U	ng/L	P394634	
		Methoxychlor	4.5	U	ng/L	P394634	
		Mirex	2.2	U	ng/L	P394634	
		MGK-264**	3.4	U	ng/L	P394634	RPD
		Permethrin	11	U	ng/L	P394634	
		Phenothrin**	34	U	ng/L	P394634	RPD
		Piperonyl Butoxide**	1.7	U	ng/L	P394634	
		Prallethrin**	28	U	ng/L	P394634	RPD
		Tau-Fluvalinate**	3.9	U	ng/L	P394634	
		Tetramethrin**	9.0	U	ng/L	P394634	
		Trans-Nonachlor**	1.1	U	ng/L	P394634	
		Triclosan Methyl**	1.1	U	ng/L	P394634	
		Trifluralin	2.8	U	ng/L	P394634	
		Chlordane	5.6	U	ng/L	P394634	
		Toxaphene	34	U	ng/L	P394634	
2229652	EPA 8270E	Acetochlor	0.25	U	ng/L	P394522	
		Alachlor	0.25	U	ng/L	P394522	
		Ametryn	0.60	U	ng/L	P394522	
		Atrazine	4.7		ng/L	P394522	
		Atrazine Desethyl	4.3	I	ng/L	P394522	
		Azinphos Methyl	2.0	UJ	ng/L	P394522	CCV
		Azoxystrobin**	0.50	UJ	ng/L	P394522	RPD
		Bromacil	0.50	I	ng/L	P394522	MS
		Butylate	0.40	U	ng/L	P394522	
		Caffeine**	7.5	I	ng/L	P394522	
		Carbophenothion	0.50	UJ	ng/L	P394522	LCS
		Carfentrazone Ethyl**	0.099	U	ng/L	P394522	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P394522	MS
		Chlorpyrifos Methyl	0.050	U	ng/L	P394522	
		Cyanazine	3.2	U	ng/L	P394522	
		Demeton	1.5	U	ng/L	P394522	
		Diazinon	0.12	U	ng/L	P394522	
		Difenoconazole**	0.60	U	ng/L	P394522	
		Dimethenamid**	0.099	U	ng/L	P394522	
		Disulfoton	0.50	U	ng/L	P394522	
		Dithiopyr**	0.17	U	ng/L	P394522	
		EPTC	1.2	U	ng/L	P394522	
		Ethion	0.15	UJ	ng/L	P394522	RPD
		Ethoprop	0.099	U	ng/L	P394522	
		Fenamiphos	0.50	U	ng/L	P394522	
		Fenbuconazole**	0.12	U	ng/L	P394522	
		Fipronil	0.25	U	ng/L	P394522	
		Fipronil Desulfinyl**	0.12	U	ng/L	P394522	
		Fipronil Sulfide	0.15	U	ng/L	P394522	
		Fipronil Sulfone	0.35	I	ng/L	P394522	

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229652	EPA 8270E	Fluazifop-P-butyl**	0.099	U	ng/L	P394522	
		Fludioxonil**	0.12	U	ng/L	P394522	
		Flumioxazin**	1.7	U	ng/L	P394522	
		Flutolanil**	0.099	U	ng/L	P394522	
		Fluxapyroxad**	0.099	UJ	ng/L	P394522	LCS
		Fonofos	0.20	U	ng/L	P394522	
		Hexazinone	0.50	U	ng/L	P394522	
		Imazalil**	0.75	U	ng/L	P394522	
		Iprodione**	0.60	U	ng/L	P394522	
		Malathion	0.35	U	ng/L	P394522	
		Metalaxyl	0.75	U	ng/L	P394522	
		Metolachlor	0.35	U	ng/L	P394522	
		Metribuzin	3.2	U	ng/L	P394522	
		Mevinphos	1.0	U	ng/L	P394522	
		Molinate	0.30	U	ng/L	P394522	
		Myclobutanil**	0.25	U	ng/L	P394522	
		Naled**	1.5	U	ng/L	P394522	
		Norflurazon	0.50	U	ng/L	P394522	
		Oxadiazon	0.30	U	ng/L	P394522	
		Oxyfluorfen**	0.15	U	ng/L	P394522	
		Parathion Ethyl	0.25	U	ng/L	P394522	
		Parathion Methyl	0.55	U	ng/L	P394522	
		Pendimethalin	0.99	U	ng/L	P394522	
		Phorate	0.52	U	ng/L	P394522	
		Prodiamine**	0.17	U	ng/L	P394522	
		Prometon	0.89	U	ng/L	P394522	
		Prometryn	0.20	U	ng/L	P394522	
		Pronamide**	0.15	U	ng/L	P394522	
		Propiconazole**	0.50	U	ng/L	P394522	
		Pyriproxyfen**	0.12	U	ng/L	P394522	
		Simazine	2.8		ng/L	P394522	MS
		Sulfentrazone**	0.78	IJ	ng/L	P394522	RPD
		Tebuconazole**	0.50	UJ	ng/L	P394522	RPD
		Terbufos	0.099	U	ng/L	P394522	
		Terbuthylazine	0.42	U	ng/L	P394522	
2229658	EPA 200.7 Rev. 4.4	Barium	16.3		ug/L	P394624	
		Calcium	4.17		mg/L	P394624	
		Iron	550		ug/L	P394624	
		Magnesium	1.16		mg/L	P394624	
		Manganese	8.0		ug/L	P394624	
		Potassium	1.5		mg/L	P394624	
		Sodium	4.9		mg/L	P394624	
		Zinc	5.0	U	ug/L	P394624	
		Aluminum	369		ug/L	P394624	
		Antimony	0.050	U	ug/L	P394624	
	EPA 200.8 Rev. 5.4						

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229658	EPA 200.8 Rev. 5.4	Arsenic	0.31		ug/L	P394624	
		Beryllium	0.016	I	ug/L	P394624	
		Boron**	20.6		ug/L	P394624	
		Cadmium	0.020	U	ug/L	P394624	
		Chromium	0.49	I	ug/L	P394624	
		Copper	0.49	I	ug/L	P394624	
		Lead	0.39	I	ug/L	P394624	
		Nickel	0.50	U	ug/L	P394624	
		Selenium	0.20	U	ug/L	P394624	
		Silver	0.010	U	ug/L	P394624	
		Thallium	0.10	U	ug/L	P394624	
	SM 2340B	Hardness	15.2		mg/L	P394624	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: MS accuracy for methomyl could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: FB_03042021

Collection Date/Time: 03/04/2021 14:10

Field ID: FB_03042021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229634	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P394574	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P394883	
		Sulfate	0.20	U	mg SO4/L	P394885	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P394581	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P394734	
	SM 2540 C-2011	TDS	15	U	mg/L	P394829	
	SM 2540 D-2011	TSS	2	U	mg/L	P394834	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P394739	
2229635	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P394633	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P394786	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P394713	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P394819	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P395113	
2229636	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P394571	
2229649	EPA 8321B	Aldicarb	0.020	U	ug/L	P394538	
		Aldicarb Sulfone	0.0020	U	ug/L	P394538	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P394538	MS
		Carbaryl	0.0020	U	ug/L	P394538	
		Carbofuran	0.0020	U	ug/L	P394538	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P394538	
		Methiocarb	0.0020	U	ug/L	P394538	
		Methomyl	0.0020	U	ug/L	P394538	
		Oxamyl	0.0020	U	ug/L	P394538	
		Propoxur	0.0020	U	ug/L	P394538	
		2,4-D	0.0020	U	ug/L	P394600	
		Acesulfame K	0.10	U	ug/L	P394640	MS
2229650		2,4,5-T	0.0040	U	ug/L	P394600	
		AMPA	0.10	U	ug/L	P394640	
		Sucralose	0.010	U	ug/L	P394640	
		Acetaminophen	0.0080	U	ug/L	P394600	
		Acetamiprid	0.0020	U	ug/L	P394600	
		Endothall	0.25	U	ug/L	P394640	
		Glufosinate	0.10	U	ug/L	P394640	
		Glyphosate	0.10	U	ug/L	P394640	MS
		Afidopyropen	0.0020	U	ug/L	P394600	
		Bentazon	8.0E-04	U	ug/L	P394600	
		Benzovindiflupyr	0.0020	U	ug/L	P394600	
		Carbamazepine	8.0E-04	U	ug/L	P394600	
		Clothianidin	0.0020	U	ug/L	P394600	
		Dinotefuran	0.0020	U	ug/L	P394600	
		Diuron	0.0020	U	ug/L	P394600	
		Fenuron	0.016	U	ug/L	P394600	
		Fluridone	8.0E-04	U	ug/L	P394600	

Field ID: FB_03042021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229650	EPA 8321B	Imazapyr	0.0040	U	ug/L	P394600	
		Hydrocodone	0.0020	U	ug/L	P394600	
		Ibuprofen	0.020	U	ug/L	P394600	
		Imidacloprid	0.0020	U	ug/L	P394600	
		Linuron	0.0040	U	ug/L	P394600	
		Mandestrobin	0.0020	U	ug/L	P394600	
		MCPP	0.0020	U	ug/L	P394600	
		Naproxen	0.0080	U	ug/L	P394600	
		Primidone	0.0040	U	ug/L	P394600	
		Pyraclostrobin	0.0020	U	ug/L	P394600	
		Thiamethoxam	0.0020	U	ug/L	P394600	
		Tolfenpyrad	0.0020	U	ug/L	P394600	
		Triclopyr	0.0040	U	ug/L	P394600	
2229656	EPA 8270E	Aldrin	4.4	U	ng/L	P394634	
		Alpha-BHC	2.2	U	ng/L	P394634	
		Alpha-Chlordane	1.1	U	ng/L	P394634	
		Beta-BHC	8.8	U	ng/L	P394634	
		Beta-Cyfluthrin**	16	U	ng/L	P394634	
		Bifenthrin**	4.4	U	ng/L	P394634	
		Delta-BHC	8.8	U	ng/L	P394634	
		Gamma-BHC	8.8	U	ng/L	P394634	
		Chlorothalonil	2.2	U	ng/L	P394634	
		Cis-Nonachlor**	1.1	U	ng/L	P394634	
		Cypermethrin	22	U	ng/L	P394634	
		Dacthal**	1.1	U	ng/L	P394634	
		DDD-p,p'	5.5	U	ng/L	P394634	
		DDE-p,p'	5.5	U	ng/L	P394634	
		DDT-p,p'	6.6	U	ng/L	P394634	
		Deltamethrin**	22	U	ng/L	P394634	
		Dicofol	33	U	ng/L	P394634	
		Dieldrin	4.4	U	ng/L	P394634	
		Endosulfan I	4.4	U	ng/L	P394634	
		Endosulfan II	4.4	U	ng/L	P394634	
		Endosulfan Sulfate	2.2	U	ng/L	P394634	
		Endrin	2.2	U	ng/L	P394634	
		Endrin Aldehyde	2.2	U	ng/L	P394634	
		Endrin Ketone	2.2	U	ng/L	P394634	
		Ethalfuralin**	3.3	U	ng/L	P394634	
		Gamma-Chlordane	1.1	U	ng/L	P394634	
		Dichlobenil**	2.2	U	ng/L	P394634	
		Esfenvalerate**	22	U	ng/L	P394634	
		Fenpropathrin**	11	U	ng/L	P394634	
		Heptachlor	1.6	U	ng/L	P394634	
		Heptachlor Epoxide	2.2	U	ng/L	P394634	
		Hexachlorobenzene	2.2	U	ng/L	P394634	

Field ID: FB_03042021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229656	EPA 8270E	Lambda-Cyhalothrin**	16	U	ng/L	P394634	
		Methoxychlor	4.4	U	ng/L	P394634	
		Mirex	2.2	U	ng/L	P394634	
		MGK-264**	3.3	U	ng/L	P394634	RPD
		Permethrin	11	U	ng/L	P394634	
		Phenothrin**	33	U	ng/L	P394634	RPD
		Piperonyl Butoxide**	1.6	U	ng/L	P394634	
		Prallethrin**	27	U	ng/L	P394634	RPD
		Tau-Fluvalinate**	3.8	U	ng/L	P394634	
		Tetramethrin**	8.8	U	ng/L	P394634	
		Trans-Nonachlor**	1.1	U	ng/L	P394634	
		Triclosan Methyl**	1.1	U	ng/L	P394634	
		Trifluralin	2.7	U	ng/L	P394634	
		Chlordane	5.5	U	ng/L	P394634	
2229657	EPA 8270E	Toxaphene	33	U	ng/L	P394634	
		Acetochlor	0.25	U	ng/L	P394522	
		Alachlor	0.25	U	ng/L	P394522	
		Ametryn	0.60	U	ng/L	P394522	
		Atrazine	0.25	U	ng/L	P394522	
		Atrazine Desethyl	1.5	U	ng/L	P394522	
		Azinphos Methyl	2.0	UJ	ng/L	P394522	CCV
		Azoxystrobin**	0.50	UJ	ng/L	P394522	RPD
		Bromacil	0.50	U	ng/L	P394522	MS
		Butylate	0.40	U	ng/L	P394522	
		Caffeine**	7.5	U	ng/L	P394522	
		Carbophenothion	0.50	UJ	ng/L	P394522	LCS
		Carfentrazone Ethyl**	0.10	U	ng/L	P394522	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P394522	MS
		Chlorpyrifos Methyl	0.050	U	ng/L	P394522	
		Cyanazine	3.2	U	ng/L	P394522	
		Demeton	1.5	U	ng/L	P394522	
		Diazinon	0.12	U	ng/L	P394522	
		Difenoconazole**	0.60	U	ng/L	P394522	
		Dimethenamid**	0.10	U	ng/L	P394522	
		Disulfoton	0.50	U	ng/L	P394522	
		Dithiopyr**	0.17	U	ng/L	P394522	
		EPTC	1.2	U	ng/L	P394522	
		Ethion	0.15	UJ	ng/L	P394522	RPD
		Ethoprop	0.10	U	ng/L	P394522	
		Fenamiphos	0.50	U	ng/L	P394522	
		Fenbuconazole**	0.12	U	ng/L	P394522	
		Fipronil	0.25	U	ng/L	P394522	
		Fipronil Desulfinyl**	0.12	U	ng/L	P394522	
		Fipronil Sulfide	0.15	U	ng/L	P394522	
		Fipronil Sulfone	0.15	U	ng/L	P394522	

Field ID: FB_03042021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229657	EPA 8270E	Fluazifop-P-butyl**	0.10	U	ng/L	P394522	
		Fludioxonil**	0.12	U	ng/L	P394522	
		Flumioxazin**	1.7	U	ng/L	P394522	
		Flutolanil**	0.10	U	ng/L	P394522	
		Fluxapyroxad**	0.10	UJ	ng/L	P394522	LCS
		Fonofos	0.20	U	ng/L	P394522	
		Hexazinone	0.50	U	ng/L	P394522	
		Imazalil**	0.75	U	ng/L	P394522	
		Iprodione**	0.60	U	ng/L	P394522	
		Malathion	0.35	U	ng/L	P394522	
		Metalaxyl	0.75	U	ng/L	P394522	
		Metolachlor	0.35	U	ng/L	P394522	
		Metribuzin	3.2	U	ng/L	P394522	
		Mevinphos	1.0	U	ng/L	P394522	
		Molinate	0.30	U	ng/L	P394522	
		Myclobutanil**	0.25	U	ng/L	P394522	
		Naled**	1.5	U	ng/L	P394522	
		Norflurazon	0.50	U	ng/L	P394522	
		Oxadiazon	0.30	U	ng/L	P394522	
		Oxyfluorfen**	0.15	U	ng/L	P394522	
		Parathion Ethyl	0.25	U	ng/L	P394522	
		Parathion Methyl	0.55	U	ng/L	P394522	
		Pendimethalin	1.0	U	ng/L	P394522	
		Phorate	0.52	U	ng/L	P394522	
		Prodiamine**	0.17	U	ng/L	P394522	
		Prometon	0.90	U	ng/L	P394522	
		Prometryn	0.20	U	ng/L	P394522	
		Pronamide**	0.15	U	ng/L	P394522	
		Propiconazole**	0.50	U	ng/L	P394522	
		Pyriproxyfen**	0.12	U	ng/L	P394522	
		Simazine	0.50	U	ng/L	P394522	MS
		Sulfentrazone**	0.50	UJ	ng/L	P394522	RPD
		Tebuconazole**	0.50	UJ	ng/L	P394522	RPD
		Terbufos	0.10	U	ng/L	P394522	
		Terbuthylazine	0.42	U	ng/L	P394522	
2229663	EPA 200.7 Rev. 4.4	Barium	1.0	U	ug/L	P394624	
		Calcium	0.075	U	mg/L	P394624	
		Iron	30	U	ug/L	P394624	
		Magnesium	0.040	U	mg/L	P394624	
		Manganese	1.0	U	ug/L	P394624	
		Potassium	0.30	U	mg/L	P394624	
		Sodium	0.50	U	mg/L	P394624	
		Zinc	5.0	U	ug/L	P394624	
		Aluminum	5.0	U	ug/L	P394624	
		Antimony	0.050	U	ug/L	P394624	
	EPA 200.8 Rev. 5.4						

Field ID: FB_03042021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2229663	EPA 200.8 Rev. 5.4	Arsenic	0.050	U	ug/L	P394624	
		Beryllium	0.010	U	ug/L	P394624	
		Boron**	2.0	U	ug/L	P394624	
		Cadmium	0.020	U	ug/L	P394624	
		Chromium	0.40	U	ug/L	P394624	
		Copper	0.40	U	ug/L	P394624	
		Lead	0.20	U	ug/L	P394624	
		Nickel	0.50	U	ug/L	P394624	
		Selenium	0.20	U	ug/L	P394624	
		Silver	0.010	U	ug/L	P394624	
		Thallium	0.10	U	ug/L	P394624	
		Hardness	0.35	U	mg/L	P394624	
	SM 2340B						

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: MS accuracy for methomyl could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P394574

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P394624

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P394624

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394883

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394885

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394633

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394786

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394622

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394712

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394713

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394655

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394819

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394571

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8270E
Batch ID: P394522

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P394522

Component	Result	Code	Units
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P394522

Component	Result	Code	Units
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E

Batch ID: P394634

Component	Result	Code	Units
Aldrin	0.75	U	ng/L
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfuralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Kepone	5.5	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P394634

Component	Result	Code	Units
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276

Batch ID: P394634

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B

Batch ID: P394538

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B

Batch ID: P394600

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCP	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P394600

Component	Result	Code	Units
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P394640

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B-2011

Batch ID: P394581

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B-2011

Batch ID: P394582

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011

Batch ID: P394734

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-2011

Batch ID: P394829

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011

Batch ID: P394831

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P394834

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P394834

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P394836

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P394739

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P395113

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P394624

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	99.8		P	85 - 115
Calcium	104		P	85 - 115
Iron	103		P	85 - 115
Magnesium	102		P	85 - 115
Manganese	99.3		P	85 - 115
Potassium	103		P	85 - 115
Sodium	105		P	85 - 115
Zinc	94.2		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P394624

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	93.5		P	85 - 115
Antimony	98.8		P	85 - 115
Arsenic	99.0		P	85 - 115
Beryllium	88.7		P	85 - 115
Boron	91.5		P	85 - 115
Cadmium	98.5		P	85 - 115
Chromium	94.0		P	85 - 115
Copper	96.2		P	85 - 115
Lead	100		P	85 - 115
Nickel	95.9		P	85 - 115
Selenium	95.5		P	85 - 115
Silver	101		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394883

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394885

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394633

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394786

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.6		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394622

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	100		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394712

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	102		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394713

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394655

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	109		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394819

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	105		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394571

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	101		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P394522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	85.7	89.4	P/P	70 - 121
Alachlor	85.1	81.9	P/P	70 - 119
Ametryn	93.1	125	P/P	61 - 135
Atrazine	85.6	85.9	P/P	76 - 123
Atrazine Desethyl	73.3	71.1	P/P	35 - 140
Azinphos Methyl	106	94.5	P/P	57 - 163
Azoxystrobin	221	154	P/P	43 - 231
Bromacil	89.2	83.6	P/P	42 - 123
Butylate	55.5	54.8	P/P	34 - 92.0
Caffeine	93.2	81.5	P/P	70 - 130
Carbophenothion	73.1	58.6	P/F	61 - 121
Carfentrazone Ethyl	91.4	75.8	P/P	62 - 139
Chlorpyrifos Ethyl	73.6	70.3	P/P	67 - 121
Chlorpyrifos Methyl	81.1	79.0	P/P	67 - 120
Cyanazine	147	142	P/P	20 - 226
Demeton	74.3	76.8	P/P	35 - 125

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P394522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Diazinon	89.4	95.9	P/P	70 - 122
Difenoconazole	177	133	P/P	56 - 186
Dimethenamid	90.7	80.1	P/P	67 - 119
Disulfoton	68.3	67.9	P/P	47 - 120
Dithiopyr	83.7	81.3	P/P	67 - 118
EPTC	59.2	51.7	P/P	33 - 90.0
Ethion	65.0	44.5	P/P	40 - 133
Ethoprop	78.3	81.5	P/P	61 - 121
Fenamiphos	91.9	87.2	P/P	31 - 139
Fenbuconazole	109	95.1	P/P	66 - 141
Fipronil	96.5	93.8	P/P	62 - 129
Fipronil Desulfinyl	86.7	86.2	P/P	59 - 126
Fipronil Sulfide	80.0	76.4	P/P	63 - 117
Fipronil Sulfone	85.9	69.7	P/P	57 - 117
Fluazifop-P-butyl	86.1	76.9	P/P	63 - 124
Fludioxonil	82.0	74.5	P/P	63 - 123
Flumioxazin	223	185	P/P	34 - 245
Flutolanil	92.1	80.2	P/P	56 - 131
Fluxapyroxad	73.9	56.7	P/F	57 - 117
Fonofos	70.9	68.7	P/P	61 - 116
Hexazinone	80.4	74.0	P/P	55 - 138
Imazalil	62.1	63.1	P/P	33 - 143
Iprodione	89.8	75.7	P/P	59 - 118
Malathion	97.5	91.2	P/P	62 - 138
Metalaxyl	82.0	81.5	P/P	24 - 147
Metolachlor	78.8	76.9	P/P	68 - 118
Metribuzin	89.6	88.2	P/P	20 - 239
Mevinphos	97.0	99.2	P/P	46 - 124
Molinate	64.8	62.7	P/P	46 - 100
Myclobutanil	80.0	70.0	P/P	32 - 149
Naled	77.3	70.0	P/P	32 - 95.0
Norflurazon	81.4	68.1	P/P	57 - 127
Oxadiazon	79.4	69.4	P/P	63 - 118
Oxyfluorfen	90.0	84.2	P/P	69 - 137
Parathion Ethyl	87.5	79.3	P/P	70 - 113
Parathion Methyl	101	101	P/P	71 - 130
Pendimethalin	73.1	68.9	P/P	55 - 118
Phorate	63.9	68.6	P/P	46 - 125
Prodiamine	62.2	65.0	P/P	20 - 141
Prometon	92.8	88.6	P/P	54 - 122
Prometryn	93.8	97.3	P/P	66 - 124
Pronamide	92.6	88.8	P/P	79 - 122
Propiconazole	80.0	74.5	P/P	61 - 126
Pyriproxyfen	81.2	61.9	P/P	52 - 131
Simazine	93.1	90.8	P/P	75 - 128
Sulfentrazone	78.8	56.8	P/P	20 - 132
Tebuconazole	34.1	23.5	P/P	20 - 116
Terbufos	77.3	74.8	P/P	61 - 117
Terbutylazine	83.6	86.8	P/P	74 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P394634

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	28.1	28.6	P/P	20 - 110
Aldrin	27.2	30.3	P/P	20 - 82.0
Alpha-BHC	74.9	86.8	P/P	58 - 130
Alpha-Chlordane	65.6	77.9	P/P	61 - 105
Beta-BHC	91.9	104	P/P	53 - 164
Beta-Cyfluthrin	52.1	65.6	P/P	40 - 140
Bifenthrin	51.3	66.6	P/P	44 - 122
Carbophenothion	34.9	42.0	P/P	20 - 161
Chlorothalonil	68.0	80.0	P/P	20 - 201
Cis-Nonachlor	66.8	80.5	P/P	60 - 110
Cypermethrin	55.3	71.7	P/P	43 - 131
Dacthal	84.0	97.0	P/P	76 - 108
DDD-p,p'	72.4	89.3	P/P	68 - 118
DDE-p,p'	61.6	74.9	P/P	56 - 107
DDT-p,p'	58.4	72.3	P/P	55 - 122
Delta-BHC	104	118	P/P	60 - 181
Deltamethrin	64.5	75.2	P/P	51 - 139
Dichlobenil	48.0	57.5	P/P	20 - 106
Dicofol	79.3	94.7	P/P	56 - 130
Dieldrin	67.4	61.7	P/P	58 - 112
Dieldrin	75.2	86.0	P/P	67 - 111
Endosulfan I	74.4	84.1	P/P	68 - 115
Endosulfan II	79.7	100	P/P	69 - 133
Endosulfan Sulfate	79.6	98.9	P/P	65 - 126
Endrin	76.5	91.4	P/P	66 - 118
Endrin Aldehyde	83.2	89.2	P/P	60 - 132
Endrin Ketone	80.9	100	P/P	68 - 121
Esfenvalerate	56.6	69.3	P/P	42 - 116
Ethalfuralin	61.1	75.1	P/P	50 - 118
Fenpropathrin	74.7	93.7	P/P	55 - 132
Gamma-BHC	85.5	95.6	P/P	65 - 147
Gamma-Chlordane	61.3	73.4	P/P	56 - 103
Heptachlor	52.0	60.3	P/P	47 - 95.0
Heptachlor Epoxide	74.3	85.2	P/P	67 - 107
Hexachlorobenzene	46.9	57.6	P/P	45 - 99.0
Kepone	106	106	P/P	28 - 128
Lambda-Cyhalothrin	50.8	65.8	P/P	41 - 135
Methoxychlor	72.0	87.1	P/P	61 - 138
MGK-264	46.7	51.8	P/P	20 - 109
Mirex	44.0	58.0	P/P	36 - 92.0
Permethrin	50.3	64.8	P/P	45 - 111
Phenothrin	28.9	36.5	P/P	22 - 88.0
Piperonyl Butoxide	83.3	100	P/P	67 - 120
Prallethrin	45.8	52.6	P/P	28 - 92.0
Tau-Fluvalinate	58.4	74.3	P/P	38 - 145
Tetramethrin	62.6	61.1	P/P	29 - 150
Trans-Nonachlor	62.5	74.2	P/P	54 - 105
Triclosan Methyl	79.0	94.1	P/P	76 - 115
Trifluralin	59.2	72.7	P/P	53 - 111

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8276

Batch ID: P394634

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	98.2	85.2	P/P	56 - 117
Toxaphene	114	103	P/P	45 - 116

Reference Method: EPA 8321B

Batch ID: P394538

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	90.6		P	30 - 160
Aldicarb	72.6		P	30 - 160
Aldicarb Sulfone	87.6		P	30 - 160
Aldicarb Sulfoxide	89.1		P	30 - 160
Carbaryl	64.2		P	30 - 160
Carbofuran	77.2		P	30 - 160
Methiocarb	74.1		P	30 - 160
Methomyl	87.9		P	30 - 160
Oxamyl	98.2		P	30 - 160
Propoxur	74.2		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P394600

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	107		P	30 - 160
2,4,5-T	90.3		P	30 - 160
Acetaminophen	87.2		P	30 - 160
Acetamiprid	89.1		P	30 - 160
Afidopyropen	68.4		P	30 - 160
Bentazon	83.9		P	30 - 160
Benzovindiflupyr	89.3		P	30 - 160
Carbamazepine	95.9		P	30 - 160
Clothianidin	95.9		P	30 - 160
Dinotefuran	88.4		P	30 - 160
Diuron	71.1		P	30 - 160
Fenuron	104		P	30 - 160
Fluridone	93.2		P	30 - 160
Hydrocodone	98.7		P	30 - 160
Ibuprofen	83.2		P	30 - 160
Imazapyr	90.3		P	30 - 160
Imidacloprid	93.9		P	30 - 160
Linuron	78.5		P	30 - 160
Mandestrobin	85.6		P	30 - 160
MCPP	115		P	30 - 160
Naproxen	52.1		P	30 - 160
Primidone	96.1		P	30 - 160
Pyraclostrobin	81.7		P	30 - 160
Thiamethoxam	102		P	30 - 160
Tolfenpyrad	55.3		P	30 - 160
Triclopyr	97.6		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P394640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	70.7		P	40 - 150
AMPA	92.7		P	40 - 150
Endothall	104		P	40 - 150
Glufosinate	132		P	40 - 150
Glyphosate	127		P	40 - 140
Sucralose	99.7		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P394581

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	85 - 115

Reference Method: SM 2120 B-2011
Batch ID: P394582

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.5		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P394734

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.4		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P394739

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P395113

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P394624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229527	Barium	101	101	P/P	80 - 120
2229527	Calcium	106	105	P/P	80 - 120
2229527	Iron	107	105	P/P	80 - 120
2229527	Magnesium	105	104	P/P	80 - 120
2229527	Manganese	99.9	99.8	P/P	80 - 120
2229527	Potassium	108	107	P/P	80 - 120
2229527	Sodium	105		P	80 - 120
2229527	Zinc	96.4	95.8	P/P	80 - 120
2229659	Barium	104		P	80 - 120
2229659	Calcium	105		P	80 - 120
2229659	Iron	103		P	80 - 120
2229659	Magnesium	102		P	80 - 120
2229659	Manganese	101		P	80 - 120
2229659	Potassium	99.4		P	80 - 120
2229659	Sodium	104		P	80 - 120
2229659	Zinc	100		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P394624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229527	Aluminum	93.3	91.8	P/P	80 - 120
2229527	Antimony	98.1	98.1	P/P	80 - 120
2229527	Arsenic	98.2	97.1	P/P	80 - 120
2229527	Beryllium	89.0	90.7	P/P	80 - 120
2229527	Boron	88.5	91.1	P/P	80 - 120
2229527	Cadmium	98.4	98.0	P/P	80 - 120
2229527	Chromium	94.9	94.8	P/P	80 - 120
2229527	Copper	91.0	94.1	P/P	80 - 120
2229527	Lead	100	101	P/P	80 - 120
2229527	Nickel	96.6	97.1	P/P	80 - 120
2229527	Selenium	86.7	85.6	P/P	80 - 120
2229527	Silver	97.9	99.0	P/P	80 - 120
2229527	Thallium	104	106	P/P	80 - 120
2229659	Aluminum	91.2		P	80 - 120
2229659	Antimony	98.1		P	80 - 120
2229659	Arsenic	96.4		P	80 - 120
2229659	Beryllium	88.8		P	80 - 120
2229659	Boron	92.0		P	80 - 120
2229659	Cadmium	97.8		P	80 - 120
2229659	Chromium	97.7		P	80 - 120
2229659	Copper	94.4		P	80 - 120
2229659	Lead	101		P	80 - 120
2229659	Nickel	94.6		P	80 - 120
2229659	Selenium	93.5		P	80 - 120
2229659	Silver	99.4		P	80 - 120
2229659	Thallium	105		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P394883

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394883

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229543	Chloride	98.8		P	90 - 110
2229796	Chloride	98.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394885

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229543	Sulfate	95.2		P	90 - 110
2229796	Sulfate	96.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394633

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229632	Ammonia-N	93.2	95.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229544	Kjeldahl Nitrogen	107	115	P/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394622

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229520	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394712

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229445	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394713

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229786	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394655

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229488	Total-P	108	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394819

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229629	Total-P	103	104	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P394571

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229627	O-Phosphate-P	103	103	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P394522

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228972	Acetochlor	84.4	81.7	P/P	66 - 122
2228972	Alachlor	85.3	77.9	P/P	65 - 122
2228972	Azinphos Methyl	81.3	76.0	P/P	44 - 174
2228972	Azoxystrobin	196	217	P/P	10 - 268
2228972	Bromacil	146	143	F/P	31 - 145
2228972	Butylate	52.8	44.6	P/P	15 - 97.0
2228972	Caffeine	84.0	87.1	P/P	70 - 130
2228972	Carbophenothion	56.4	61.5	P/P	42 - 129
2228972	Carfentrazone Ethyl	72.2	68.9	P/P	62 - 145
2228972	Chlorpyrifos Ethyl	49.9	58.6	F/F	60 - 124
2228972	Chlorpyrifos Methyl	74.3	76.2	P/P	66 - 119
2228972	Cyanazine	119	135	P/P	17 - 225
2228972	Demeton	90.8	68.5	P/P	36 - 142
2228972	Diazinon	90.2	90.6	P/P	70 - 128
2228972	Difenoconazole	143	156	P/P	33 - 222
2228972	Dimethenamid	82.8	75.2	P/P	54 - 125
2228972	Disulfoton	68.5	69.4	P/P	49 - 133
2228972	Dithiopyr	56.9	63.6	P/P	55 - 123
2228972	EPTC	51.9	45.2	P/P	19 - 91.0
2228972	Ethion	30.6	35.8	P/P	13 - 143
2228972	Ethoprop	87.4	84.2	P/P	49 - 144
2228972	Fenamiphos	53.0	62.1	P/P	32 - 136
2228972	Fenbuconazole	103	99.9	P/P	73 - 148
2228972	Fipronil	88.5	87.4	P/P	57 - 129
2228972	Fipronil Desulfinyl	75.6	77.1	P/P	49 - 127
2228972	Fipronil Sulfide	71.5	73.1	P/P	44 - 127
2228972	Fipronil Sulfone	69.4	73.2	P/P	35 - 126
2228972	Fluazifop-P-butyl	67.1	73.2	P/P	67 - 129
2228972	Fludioxonil	75.0	75.2	P/P	61 - 126
2228972	Flumioxazin	186	200	P/P	38 - 279
2228972	Flutolanil	75.6	81.8	P/P	55 - 136
2228972	Fluxapyroxad	58.8	59.0	P/P	33 - 140
2228972	Fonofos	60.2	65.0	P/P	58 - 125
2228972	Imazalil	104	114	P/P	10 - 221
2228972	Iprodione	71.1	72.2	P/P	32 - 140
2228972	Malathion	96.4	97.6	P/P	52 - 138
2228972	Metalaxyl	77.7	76.0	P/P	46 - 134
2228972	Metolachlor	85.9	79.4	P/P	58 - 122
2228972	Metribuzin	85.6	83.9	P/P	16 - 272
2228972	Mevinphos	110	105	P/P	45 - 140
2228972	Molinate	62.6	57.3	P/P	41 - 103
2228972	Myclobutanil	67.7	63.3	P/P	60 - 134
2228972	Naled	68.9	73.5	P/P	20 - 113
2228972	Norflurazon	119	123	P/P	51 - 123
2228972	Oxadiazon	67.1	69.3	P/P	44 - 125
2228972	Oxyfluorfen	83.3	83.6	P/P	66 - 176

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P394522

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228972	Parathion Ethyl	84.7	84.5	P/P	57 - 132
2228972	Parathion Methyl	107	106	P/P	59 - 156
2228972	Pendimethalin	66.1	67.2	P/P	59 - 129
2228972	Phorate	73.6	69.2	P/P	47 - 136
2228972	Prodiamine	64.2	65.8	P/P	10 - 159
2228972	Prometon	95.4	89.5	P/P	59 - 127
2228972	Prometryn	87.7	90.5	P/P	59 - 129
2228972	Pronamide	83.8	82.0	P/P	65 - 145
2228972	Propiconazole	72.2	73.3	P/P	28 - 165
2228972	Pyriproxyfen	65.8	78.9	P/P	21 - 180
2228972	Simazine	157	151	F/F	63 - 147
2228972	Sulfentrazone	64.9	72.0	P/P	32 - 136
2228972	Tebuconazole	19.5	22.4	P/P	-8.3 - 117
2228972	Terbufos	79.9	78.8	P/P	61 - 131
2228972	Terbutylazine	90.6	79.5	P/P	62 - 126

Reference Method: EPA 8270E

Batch ID: P394634

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229653	Aldrin	35.2	31.9	P/P	22 - 127
2229653	Dieldrin	57.4	53.7	P/P	52 - 123
2229653	Kepone	113	101	P/P	18 - 138
2229894	Aldrin	29.6	39.8	P/P	29 - 83.0
2229894	Alpha-BHC	77.2	83.7	P/P	53 - 147
2229894	Alpha-Chlordane	69.1	82.0	P/P	56 - 107
2229894	Beta-BHC	91.1	101	P/P	43 - 182
2229894	Beta-Cyfluthrin	63.7	72.3	P/P	42 - 157
2229894	Bifenthrin	67.1	74.4	P/P	52 - 124
2229894	Carbophenothion	54.6	74.7	P/P	40 - 172
2229894	Chlorothalonil	65.9	80.1	P/P	10 - 265
2229894	Cis-Nonachlor	71.4	86.6	P/P	55 - 112
2229894	Cypermethrin	69.2	79.9	P/P	46 - 144
2229894	Dacthal	83.9	96.4	P/P	72 - 110
2229894	DDD-p,p'	77.7	94.4	P/P	58 - 123
2229894	DDE-p,p'	66.3	78.6	P/P	52 - 106
2229894	DDT-p,p'	64.3	74.9	P/P	50 - 127
2229894	Delta-BHC	108	115	P/P	56 - 222
2229894	Deltamethrin	75.1	84.7	P/P	47 - 152
2229894	Dichlobenil	45.7	49.3	P/P	22 - 99.0
2229894	Dicofol	85.1	95.0	P/P	38 - 145
2229894	Dieldrin	76.0	88.6	P/P	59 - 118
2229894	Endosulfan I	79.2	91.9	P/P	64 - 124
2229894	Endosulfan II	83.5	99.3	P/P	52 - 159
2229894	Endosulfan Sulfate	84.0	95.0	P/P	62 - 136
2229894	Endrin	76.3	91.7	P/P	57 - 126
2229894	Endrin Aldehyde	82.4	93.0	P/P	41 - 128
2229894	Endrin Ketone	81.9	93.9	P/P	67 - 129
2229894	Esfenvalerate	69.4	78.4	P/P	50 - 120
2229894	Ethalfuralin	64.7	73.9	P/P	41 - 125
2229894	Fenpropathrin	82.8	92.5	P/P	40 - 202
2229894	Gamma-BHC	84.8	93.7	P/P	58 - 180

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P394634

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229894	Gamma-Chlordane	65.2	77.8	P/P	54 - 103
2229894	Heptachlor	57.6	65.2	P/P	46 - 94.0
2229894	Heptachlor Epoxide	76.0	87.2	P/P	62 - 111
2229894	Hexachlorobenzene	54.6	59.5	P/P	42 - 95.0
2229894	Lambda-Cyhalothrin	65.3	73.7	P/P	37 - 162
2229894	Methoxychlor	75.7	86.2	P/P	52 - 143
2229894	MGK-264	38.9	63.7	P/P	37 - 102
2229894	Mirex	53.8	62.3	P/P	43 - 91.0
2229894	Permethrin	61.7	70.5	P/P	48 - 113
2229894	Phenothrin	35.0	48.4	P/P	30 - 104
2229894	Piperonyl Butoxide	88.3	99.8	P/P	67 - 127
2229894	Prallethrin	41.2	61.0	P/P	28 - 102
2229894	Tau-Fluvalinate	76.6	86.7	P/P	46 - 174
2229894	Tetramethrin	68.4	85.4	P/P	28 - 176
2229894	Trans-Nonachlor	66.9	80.1	P/P	51 - 103
2229894	Triclosan Methyl	82.7	98.4	P/P	67 - 116
2229894	Trifluralin	63.4	73.1	P/P	47 - 118

Reference Method: EPA 8276

Batch ID: P394634

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229653	Chlordane	70.1	67.6	P/P	47 - 128
2229653	Toxaphene	96.1	101	P/P	11 - 163

Reference Method: EPA 8321B

Batch ID: P394538

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229585	3-Hydroxycarbofuran	86.7	80.2	P/P	30 - 160
2229585	Aldicarb	70.3	62.8	P/P	30 - 160
2229585	Aldicarb Sulfone	90.7	86.6	P/P	30 - 160
2229585	Aldicarb Sulfoxide	23.8	24.7	F/F	30 - 160
2229585	Carbaryl	47.3	46.0	P/P	30 - 160
2229585	Carbofuran	55.5	48.8	P/P	30 - 160
2229585	Methiocarb	60.1	59.5	P/P	30 - 160
2229585	Oxamyl	83.4	76.1	P/P	30 - 160
2229585	Propoxur	54.8	48.1	P/P	30 - 160

Reference Method: EPA 8321B

Batch ID: P394600

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229501	2,4-D	101	118	P/P	30 - 160
2229501	2,4,5-T	93.4	95.3	P/P	30 - 160
2229501	Acetaminophen	100	126	P/P	30 - 160
2229501	Acetamiprid	79.0	83.1	P/P	30 - 160
2229501	Afidopyropen	67.2	68.3	P/P	30 - 160
2229501	Benzovindiflupyr	80.2	88.5	P/P	30 - 160
2229501	Carbamazepine	73.6	81.6	P/P	30 - 160
2229501	Clothianidin	95.5	101	P/P	30 - 160
2229501	Dinotefuran	112	122	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P394600

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229501	Diuron	41.9	51.6	P/P	30 - 160
2229501	Fenuron	76.7	80.2	P/P	30 - 160
2229501	Fluridone	69.6	64.0	P/P	30 - 160
2229501	Hydrocodone	90.4	103	P/P	30 - 160
2229501	Ibuprofen	77.0	87.8	P/P	30 - 160
2229501	Imidacloprid	132	138	P/P	30 - 160
2229501	Linuron	53.8	63.3	P/P	30 - 160
2229501	Mandestrobin	73.1	80.1	P/P	30 - 160
2229501	MCCP	102	103	P/P	30 - 160
2229501	Naproxen	62.5	81.4	P/P	30 - 160
2229501	Primidone	81.8	97.6	P/P	30 - 160
2229501	Pyraclostrobin	77.1	85.8	P/P	30 - 160
2229501	Thiamethoxam	133	147	P/P	30 - 160
2229501	Tolfenpyrad	51.5	58.3	P/P	30 - 160
2229501	Triclopyr	97.7	102	P/P	30 - 160

Reference Method: EPA 8321B

Batch ID: P394640

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229501	Acesulfame K	141	165	P/F	40 - 150
2229501	AMPA	118	116	P/P	40 - 150
2229501	Endothall	148	113	P/P	40 - 150
2229501	Glufosinate	118	130	P/P	40 - 150
2229501	Glyphosate	39.6	54.5	F/P	40 - 140
2229501	Sucralose	123	120	P/P	40 - 150

Reference Method: SM 4500 F-C-2011

Batch ID: P394739

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229495	Fluoride	99.8	99.8	P/P	94 - 107

Reference Method: SM 5310 B-2011

Batch ID: P395113

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229546	Organic Carbon	94.1	94.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P394574

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229541	Turbidity	4.45	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P394624

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229527	Barium	0.122	Spike	P	0 - 20
2229527	Calcium	0.856	Spike	P	0 - 20
2229527	Iron	1.09	Spike	P	0 - 20
2229527	Magnesium	0.780	Spike	P	0 - 20
2229527	Manganese	0.172	Spike	P	0 - 20
2229527	Potassium	0.757	Spike	P	0 - 20
2229527	Sodium	0.457	Spike	P	0 - 20
2229527	Zinc	0.553	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P394624

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229527	Aluminum	1.53	Spike	P	0 - 20
2229527	Antimony	0.0703	Spike	P	0 - 20
2229527	Arsenic	1.15	Spike	P	0 - 20
2229527	Beryllium	1.77	Spike	P	0 - 20
2229527	Boron	2.57	Spike	P	0 - 20
2229527	Cadmium	0.395	Spike	P	0 - 20
2229527	Chromium	0.159	Spike	P	0 - 20
2229527	Copper	2.12	Spike	P	0 - 20
2229527	Lead	0.545	Spike	P	0 - 20
2229527	Nickel	0.512	Spike	P	0 - 20
2229527	Selenium	1.28	Spike	P	0 - 20
2229527	Silver	1.12	Spike	P	0 - 20
2229527	Thallium	1.64	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P394883

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229543	Chloride	1.85	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P394885

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229543	Sulfate	1.52	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394633

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229632	Ammonia-N	1.91	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229544	Kjeldahl Nitrogen	5.11	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229520	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229445	NO2NO3-N	0.499	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394713

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229786	NO2NO3-N	0.482	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394655

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229488	Total-P	1.32	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394819

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229629	Total-P	1.39	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229627	O-Phosphate-P	0.388	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P394522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228972	Acetochlor	3.16	Spike	P	0 - 30
2228972	Alachlor	9.01	Spike	P	0 - 30
2228972	Ametryn	2.93	Spike	P	0 - 30
2228972	Atrazine	9.81	Spike	P	0 - 30
2228972	Atrazine Desethyl	3.95	Spike	P	0 - 30
2228972	Azinphos Methyl	6.78	Spike	P	0 - 30
2228972	Azoxystrobin	10.0	Spike	P	0 - 30
2228972	Bromacil	2.24	Spike	P	0 - 30
2228972	Butylate	16.8	Spike	P	0 - 30
2228972	Caffeine	3.61	Spike	P	0 - 30
2228972	Carbophenothion	8.52	Spike	P	0 - 30
2228972	Carfentrazone Ethyl	4.65	Spike	P	0 - 30
2228972	Chlorpyrifos Ethyl	12.8	Spike	P	0 - 30
2228972	Chlorpyrifos Methyl	2.59	Spike	P	0 - 30
2228972	Cyanazine	13.1	Spike	P	0 - 30
2228972	Demeton	28.1	Spike	P	0 - 30
2228972	Diazinon	0.464	Spike	P	0 - 30
2228972	Difenoconazole	8.71	Spike	P	0 - 30
2228972	Dimethenamid	9.61	Spike	P	0 - 30
2228972	Disulfoton	1.40	Spike	P	0 - 30
2228972	Dithiopyr	11.1	Spike	P	0 - 30
2228972	EPTC	13.9	Spike	P	0 - 30
2228972	Ethion	15.6	Spike	P	0 - 30
2228972	Ethoprop	3.81	Spike	P	0 - 30
2228972	Fenamiphos	15.8	Spike	P	0 - 30
2228972	Fenbuconazole	3.30	Spike	P	0 - 30
2228972	Fipronil	1.24	Spike	P	0 - 30
2228972	Fipronil Desulfinyl	2.09	Spike	P	0 - 30
2228972	Fipronil Sulfide	2.16	Spike	P	0 - 30
2228972	Fipronil Sulfone	5.39	Spike	P	0 - 30
2228972	Fluazifop-P-butyl	8.77	Spike	P	0 - 30
2228972	Fludioxonil	0.220	Spike	P	0 - 30
2228972	Flumioxazin	7.35	Spike	P	0 - 30
2228972	Flutolanil	7.26	Spike	P	0 - 30
2228972	Fluxapyroxad	0.298	Spike	P	0 - 30
2228972	Fonofos	7.66	Spike	P	0 - 30
2228972	Hexazinone	5.06	Spike	P	0 - 30
2228972	Imazalil	9.21	Spike	P	0 - 30
2228972	Iprodione	1.63	Spike	P	0 - 30
2228972	Malathion	1.26	Spike	P	0 - 30
2228972	Metalaxyl	1.73	Spike	P	0 - 30
2228972	Metolachlor	3.84	Spike	P	0 - 30
2228972	Metribuzin	1.37	Spike	P	0 - 30
2228972	Mevinphos	4.85	Spike	P	0 - 30
2228972	Molinate	8.79	Spike	P	0 - 30
2228972	Myclobutanil	6.68	Spike	P	0 - 30
2228972	Naled	6.44	Spike	P	0 - 30
2228972	Norflurazon	2.29	Spike	P	0 - 30
2228972	Oxadiazon	3.18	Spike	P	0 - 30
2228972	Oxyfluorfen	0.345	Spike	P	0 - 30
2228972	Parathion Ethyl	0.182	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P394522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228972	Parathion Methyl	1.54	Spike	P	0 - 30
2228972	Pendimethalin	0.939	Spike	P	0 - 30
2228972	Phorate	6.21	Spike	P	0 - 30
2228972	Prodiamine	2.41	Spike	P	0 - 30
2228972	Prometon	6.30	Spike	P	0 - 30
2228972	Prometryn	3.12	Spike	P	0 - 30
2228972	Pronamide	1.69	Spike	P	0 - 30
2228972	Propiconazole	0.965	Spike	P	0 - 30
2228972	Pyriproxyfen	18.1	Spike	P	0 - 30
2228972	Simazine	4.22	Spike	P	0 - 30
2228972	Sulfentrazone	10.4	Spike	P	0 - 30
2228972	Tebuconazole	14.1	Spike	P	0 - 30
2228972	Terbufos	1.35	Spike	P	0 - 30
2228972	Terbuthylazine	13.0	Spike	P	0 - 30
LFB	Acetochlor	4.21	LCS	P	0 - 30
LFB	Alachlor	3.76	LCS	P	0 - 30
LFB	Ametryn	29.0	LCS	P	0 - 30
LFB	Atrazine	0.369	LCS	P	0 - 30
LFB	Atrazine Desethyl	3.03	LCS	P	0 - 30
LFB	Azinphos Methyl	11.3	LCS	P	0 - 30
LFB	Azoxystrobin	35.5	LCS	F	0 - 30
LFB	Bromacil	6.48	LCS	P	0 - 30
LFB	Butylate	1.20	LCS	P	0 - 30
LFB	Caffeine	13.4	LCS	P	0 - 30
LFB	Carbophenothion	22.1	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	18.6	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.61	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.59	LCS	P	0 - 30
LFB	Cyanazine	3.64	LCS	P	0 - 30
LFB	Demeton	3.28	LCS	P	0 - 30
LFB	Diazinon	6.97	LCS	P	0 - 30
LFB	Difenoconazole	28.0	LCS	P	0 - 30
LFB	Dimethenamid	12.3	LCS	P	0 - 30
LFB	Disulfoton	0.547	LCS	P	0 - 30
LFB	Dithiopyr	2.96	LCS	P	0 - 30
LFB	EPTC	13.5	LCS	P	0 - 30
LFB	Ethion	37.3	LCS	F	0 - 30
LFB	Ethoprop	3.95	LCS	P	0 - 30
LFB	Fenamiphos	5.28	LCS	P	0 - 30
LFB	Fenbuconazole	14.0	LCS	P	0 - 30
LFB	Fipronil	2.80	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	0.587	LCS	P	0 - 30
LFB	Fipronil Sulfide	4.62	LCS	P	0 - 30
LFB	Fipronil Sulfone	20.9	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	11.2	LCS	P	0 - 30
LFB	Fludioxonil	9.59	LCS	P	0 - 30
LFB	Flumioxazin	19.0	LCS	P	0 - 30
LFB	Flutolanil	13.8	LCS	P	0 - 30
LFB	Fluxapyroxad	26.3	LCS	P	0 - 30
LFB	Fonofos	3.08	LCS	P	0 - 30
LFB	Hexazinone	8.30	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P394522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Imazalil	1.59	LCS	P	0 - 30
LFB	Iprodione	17.0	LCS	P	0 - 30
LFB	Malathion	6.68	LCS	P	0 - 30
LFB	Metalaxyl	0.526	LCS	P	0 - 30
LFB	Metolachlor	2.52	LCS	P	0 - 30
LFB	Metribuzin	1.61	LCS	P	0 - 30
LFB	Mevinphos	2.26	LCS	P	0 - 30
LFB	Molinate	3.30	LCS	P	0 - 30
LFB	Myclobutanil	13.3	LCS	P	0 - 30
LFB	Naled	9.89	LCS	P	0 - 30
LFB	Norflurazon	17.9	LCS	P	0 - 30
LFB	Oxadiazon	13.5	LCS	P	0 - 30
LFB	Oxyfluorfen	6.65	LCS	P	0 - 30
LFB	Parathion Ethyl	9.78	LCS	P	0 - 30
LFB	Parathion Methyl	0.777	LCS	P	0 - 30
LFB	Pendimethalin	5.92	LCS	P	0 - 30
LFB	Phorate	7.00	LCS	P	0 - 30
LFB	Prodiamine	4.40	LCS	P	0 - 30
LFB	Prometon	4.69	LCS	P	0 - 30
LFB	Prometryn	3.64	LCS	P	0 - 30
LFB	Pronamide	4.23	LCS	P	0 - 30
LFB	Propiconazole	7.06	LCS	P	0 - 30
LFB	Pyriproxyfen	26.9	LCS	P	0 - 30
LFB	Simazine	2.56	LCS	P	0 - 30
LFB	Sulfentrazone	32.5	LCS	F	0 - 30
LFB	Tebuconazole	36.8	LCS	F	0 - 30
LFB	Terbufos	3.31	LCS	P	0 - 30
LFB	Terbutylazine	3.73	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P394634

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229653	Aldrin	9.72	Spike	P	0 - 30
2229653	Dieldrin	5.45	Spike	P	0 - 30
2229653	Kepone	11.0	Spike	P	0 - 30
2229894	Aldrin	29.5	Spike	P	0 - 30
2229894	Alpha-BHC	8.08	Spike	P	0 - 30
2229894	Alpha-Chlordane	17.0	Spike	P	0 - 30
2229894	Beta-BHC	10.1	Spike	P	0 - 30
2229894	Beta-Cyfluthrin	12.6	Spike	P	0 - 30
2229894	Bifenthrin	10.3	Spike	P	0 - 30
2229894	Carbophenothion	31.1	Spike	F	0 - 30
2229894	Chlorothalonil	19.4	Spike	P	0 - 30
2229894	Cis-Nonachlor	19.2	Spike	P	0 - 30
2229894	Cypermethrin	14.2	Spike	P	0 - 30
2229894	Dacthal	13.9	Spike	P	0 - 30
2229894	DDD-p,p'	19.3	Spike	P	0 - 30
2229894	DDE-p,p'	16.9	Spike	P	0 - 30
2229894	DDT-p,p'	15.2	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P394634

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229894	Delta-BHC	6.24	Spike	P	0 - 30
2229894	Deltamethrin	11.9	Spike	P	0 - 30
2229894	Dichlobenil	7.50	Spike	P	0 - 30
2229894	Dicofol	11.0	Spike	P	0 - 30
2229894	Dieldrin	15.3	Spike	P	0 - 30
2229894	Endosulfan I	14.9	Spike	P	0 - 30
2229894	Endosulfan II	17.3	Spike	P	0 - 30
2229894	Endosulfan Sulfate	12.3	Spike	P	0 - 30
2229894	Endrin	18.3	Spike	P	0 - 30
2229894	Endrin Aldehyde	12.0	Spike	P	0 - 30
2229894	Endrin Ketone	13.6	Spike	P	0 - 30
2229894	Esfenvalerate	12.1	Spike	P	0 - 30
2229894	Ethalfuralin	13.3	Spike	P	0 - 30
2229894	Fenpropathrin	11.1	Spike	P	0 - 30
2229894	Gamma-BHC	9.96	Spike	P	0 - 30
2229894	Gamma-Chlordane	17.6	Spike	P	0 - 30
2229894	Heptachlor	12.3	Spike	P	0 - 30
2229894	Heptachlor Epoxide	13.8	Spike	P	0 - 30
2229894	Hexachlorobenzene	8.53	Spike	P	0 - 30
2229894	Lambda-Cyhalothrin	12.1	Spike	P	0 - 30
2229894	Methoxychlor	13.0	Spike	P	0 - 30
2229894	MGK-264	48.3	Spike	F	0 - 30
2229894	Mirex	14.6	Spike	P	0 - 30
2229894	Permethrin	13.2	Spike	P	0 - 30
2229894	Phenothrin	32.0	Spike	F	0 - 30
2229894	Piperonyl Butoxide	12.2	Spike	P	0 - 30
2229894	Prallethrin	38.7	Spike	F	0 - 30
2229894	Tau-Fluvalinate	12.3	Spike	P	0 - 30
2229894	Tetramethrin	22.1	Spike	P	0 - 30
2229894	Trans-Nonachlor	17.9	Spike	P	0 - 30
2229894	Triclosan Methyl	17.3	Spike	P	0 - 30
2229894	Trifluralin	14.3	Spike	P	0 - 30
LFB	Aldrin	1.52	LCS	P	0 - 30
LFB	Aldrin	11.1	LCS	P	0 - 30
LFB	Alpha-BHC	14.7	LCS	P	0 - 30
LFB	Alpha-Chlordane	17.2	LCS	P	0 - 30
LFB	Beta-BHC	12.5	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	22.9	LCS	P	0 - 30
LFB	Bifenthrin	25.9	LCS	P	0 - 30
LFB	Carbophenothion	18.3	LCS	P	0 - 30
LFB	Chlorothalonil	16.2	LCS	P	0 - 30
LFB	Cis-Nonachlor	18.6	LCS	P	0 - 30
LFB	Cypermethrin	25.8	LCS	P	0 - 30
LFB	Dacthal	14.4	LCS	P	0 - 30
LFB	DDD-p,p'	20.9	LCS	P	0 - 30
LFB	DDE-p,p'	19.4	LCS	P	0 - 30
LFB	DDT-p,p'	21.3	LCS	P	0 - 30
LFB	Delta-BHC	13.0	LCS	P	0 - 30
LFB	Deltamethrin	15.4	LCS	P	0 - 30
LFB	Dichlobenil	18.0	LCS	P	0 - 30
LFB	Dicofol	17.7	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P394634

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dieldrin	8.93	LCS	P	0 - 30
LFB	Dieldrin	13.5	LCS	P	0 - 30
LFB	Endosulfan I	12.2	LCS	P	0 - 30
LFB	Endosulfan II	22.7	LCS	P	0 - 30
LFB	Endosulfan Sulfate	21.6	LCS	P	0 - 30
LFB	Endrin	17.8	LCS	P	0 - 30
LFB	Endrin Aldehyde	6.99	LCS	P	0 - 30
LFB	Endrin Ketone	21.3	LCS	P	0 - 30
LFB	Esfenvalerate	20.2	LCS	P	0 - 30
LFB	Ethalfuralin	20.5	LCS	P	0 - 30
LFB	Fenpropathrin	22.6	LCS	P	0 - 30
LFB	Gamma-BHC	11.1	LCS	P	0 - 30
LFB	Gamma-Chlordane	17.9	LCS	P	0 - 30
LFB	Heptachlor	14.7	LCS	P	0 - 30
LFB	Heptachlor Epoxide	13.7	LCS	P	0 - 30
LFB	Hexachlorobenzene	20.5	LCS	P	0 - 30
LFB	Kepone	0.405	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	25.7	LCS	P	0 - 30
LFB	Methoxychlor	19.0	LCS	P	0 - 30
LFB	MGK-264	10.4	LCS	P	0 - 30
LFB	Mirex	27.5	LCS	P	0 - 30
LFB	Permethrin	25.1	LCS	P	0 - 30
LFB	Phenothrin	23.3	LCS	P	0 - 30
LFB	Piperonyl Butoxide	18.4	LCS	P	0 - 30
LFB	Prallethrin	13.8	LCS	P	0 - 30
LFB	Tau-Fluvalinate	23.9	LCS	P	0 - 30
LFB	Tetramethrin	2.48	LCS	P	0 - 30
LFB	Trans-Nonachlor	17.1	LCS	P	0 - 30
LFB	Triclosan Methyl	17.4	LCS	P	0 - 30
LFB	Trifluralin	20.4	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P394634

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229653	Chlordane	3.23	Spike	P	0 - 30
2229653	Toxaphene	4.69	Spike	P	0 - 30
LFB	Chlordane	14.2	LCS	P	0 - 30
LFB	Toxaphene	9.96	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P394538

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229585	3-Hydroxycarbofuran	7.77	Spike	P	0 - 30
2229585	Aldicarb	11.3	Spike	P	0 - 30
2229585	Aldicarb Sulfone	4.65	Spike	P	0 - 30
2229585	Aldicarb Sulfoxide	3.86	Spike	P	0 - 30
2229585	Carbaryl	2.65	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P394538

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229585	Carbofuran	12.7	Spike	P	0 - 30
2229585	Methiocarb	0.869	Spike	P	0 - 30
2229585	Methomyl	4.74	Spike	P	0 - 30
2229585	Oxamyl	9.11	Spike	P	0 - 30
2229585	Propoxur	13.1	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P394600

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229501	2,4-D	9.49	Spike	P	0 - 30
2229501	2,4,5-T	2.09	Spike	P	0 - 30
2229501	Acetaminophen	13.7	Spike	P	0 - 30
2229501	Acetamiprid	5.14	Spike	P	0 - 30
2229501	Afidopyropen	1.64	Spike	P	0 - 30
2229501	Bentazon	7.56	Spike	P	0 - 30
2229501	Benzovindiflupyr	9.79	Spike	P	0 - 30
2229501	Carbamazepine	9.68	Spike	P	0 - 30
2229501	Clothianidin	5.83	Spike	P	0 - 30
2229501	Dinotefuran	8.45	Spike	P	0 - 30
2229501	Diuron	16.8	Spike	P	0 - 30
2229501	Fenuron	4.42	Spike	P	0 - 30
2229501	Fluridone	4.91	Spike	P	0 - 30
2229501	Hydrocodone	13.0	Spike	P	0 - 30
2229501	Ibuprofen	13.1	Spike	P	0 - 30
2229501	Imazapyr	12.0	Spike	P	0 - 30
2229501	Imidacloprid	3.44	Spike	P	0 - 30
2229501	Linuron	16.3	Spike	P	0 - 30
2229501	Mandestrobin	9.19	Spike	P	0 - 30
2229501	MCP	0.679	Spike	P	0 - 30
2229501	Naproxen	26.2	Spike	P	0 - 30
2229501	Primidone	14.9	Spike	P	0 - 30
2229501	Pyraclostrobin	10.6	Spike	P	0 - 30
2229501	Thiamethoxam	10.3	Spike	P	0 - 30
2229501	Tolfenpyrad	12.4	Spike	P	0 - 30
2229501	Triclopyr	3.94	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P394640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229501	Acesulfame K	13.2	Spike	P	0 - 30
2229501	AMPA	1.65	Spike	P	0 - 30
2229501	Endothall	27.2	Spike	P	0 - 30
2229501	Glufosinate	9.09	Spike	P	0 - 30
2229501	Glyphosate	17.2	Spike	P	0 - 30
2229501	Sucralose	1.86	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
Batch ID: P394581

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229542	Color (true)	0.138	Sample	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P394582

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229625	Color (true)	0.398	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P394734

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229495	Total Alkalinity	1.47	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P394829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228947	TDS	1.73	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P394831

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229543	TDS	6.40	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P394739

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229495	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P395113

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229546	Organic Carbon	0.479	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Surrogates

Lab Sample ID: 2229647
Field Sample ID: G5NW0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	44.3	P	30 - 160

Lab Sample ID: 2229648
Field Sample ID: G5NW0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	119	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	84.2	P	30 - 160
EPA 8321B	Diuron-d6	58.3	P	30 - 160
EPA 8321B	Endothall-d6	114	P	40 - 160
EPA 8321B	Endothall-d6	114	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	97.0	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	97.0	P	40 - 160
EPA 8321B	Ibuprofen-d3	69.8	P	30 - 160
EPA 8321B	Primidone-d5	98.2	P	30 - 160
EPA 8321B	Sucralose-d6	112	P	30 - 160
EPA 8321B	Sucralose-d6	112	P	30 - 160

Lab Sample ID: 2229649
Field Sample ID: FB_03042021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	53.8	P	30 - 160

Lab Sample ID: 2229650
Field Sample ID: FB_03042021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	80.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	84.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.6	P	30 - 160
EPA 8321B	Diuron-d6	79.7	P	30 - 160
EPA 8321B	Endothall-d6	113	P	40 - 160
EPA 8321B	Endothall-d6	113	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	131	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	131	P	40 - 160
EPA 8321B	Ibuprofen-d3	78.2	P	30 - 160
EPA 8321B	Primidone-d5	95.7	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2229651
Field Sample ID: G5NW0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	67.6	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	47.2	P	33 - 102
EPA 8276	Decachlorobiphenyl	50.5	P	29 - 92.0
EPA 8276	PCNB	73.2	P	43 - 134

Quality Assurance Report Surrogates

Lab Sample ID: 2229652
Field Sample ID: G5NW0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	72.5	P	20 - 200
EPA 8270E	Simazine-d10	111	P	73 - 135
EPA 8270E	Terbufos-d10	96.1	P	58 - 130

Lab Sample ID: 2229653
Field Sample ID: G5NW0161

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	71.5	P	40 - 123
EPA 8270E	Decachlorobiphenyl	60.0	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	51.7	P	31 - 100
EPA 8270E	Tetrachloro-m-xylene	50.7	P	33 - 102
EPA 8276	Decachlorobiphenyl	44.6	P	29 - 92.0
EPA 8276	PCNB	78.9	P	43 - 134

Lab Sample ID: 2229654
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	67.9	P	40 - 123
EPA 8270E	Decachlorobiphenyl	55.6	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	44.7	P	31 - 100
EPA 8270E	Tetrachloro-m-xylene	45.1	P	33 - 102
EPA 8276	Decachlorobiphenyl	38.7	P	29 - 92.0
EPA 8276	PCNB	69.1	P	43 - 134

Lab Sample ID: 2229655
Field Sample ID: G4NW0429

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	111	P	40 - 123
EPA 8270E	Decachlorobiphenyl	79.2	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	56.5	P	31 - 100
EPA 8270E	Tetrachloro-m-xylene	56.6	P	33 - 102
EPA 8276	Decachlorobiphenyl	53.9	P	29 - 92.0
EPA 8276	PCNB	93.8	P	43 - 134

Lab Sample ID: 2229656
Field Sample ID: FB_03042021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	53.5	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	48.4	P	33 - 102
EPA 8276	Decachlorobiphenyl	42.5	P	29 - 92.0
EPA 8276	PCNB	69.5	P	43 - 134

Lab Sample ID: 2229657
Field Sample ID: FB_03042021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	68.9	P	20 - 200
EPA 8270E	Simazine-d10	103	P	73 - 135

Quality Assurance Report Surrogates

Lab Sample ID: 2229657
Field Sample ID: FB_03042021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Terbufos-d10	89.3	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A103917

Included Lab Sample IDs: 2229627, 2229630, 2229633, 2229636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.3	98.5	P/P	90 - 110
O-Phosphate-P	98.5	98.6	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A103918

Included Lab Sample IDs: 2229625, 2229628, 2229631, 2229634

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	102	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A103920

Included Lab Sample IDs: 2229625, 2229628, 2229631, 2229634

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	104	P/P	90 - 115
Color (true)	103	102	P/P	90 - 115

Reference Method: EPA 8321B

Run ID: A103927

Included Lab Sample IDs: 2229647, 2229649

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	96.8	105	P/P	60 - 150
Aldicarb	86.7	85.8	P/P	60 - 150
Aldicarb Sulfone	91.0	99.2	P/P	50 - 150
Aldicarb Sulfoxide	101	101	P/P	50 - 150
Carbaryl	98.0	92.4	P/P	60 - 150
Carbofuran	107	105	P/P	50 - 150
Methiocarb	104	103	P/P	50 - 150
Methomyl	95.0	105	P/P	50 - 150
Oxamyl	104	103	P/P	50 - 150
Propoxur	107	104	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103943

Included Lab Sample IDs: 2229626, 2229632

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A103952

Included Lab Sample IDs: 2229626, 2229629, 2229632, 2229635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	97.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A103966

Included Lab Sample IDs: 2229648, 2229650

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	81.0	90.1	P/P	50 - 150
2,4,5-T	87.5	84.3	P/P	50 - 150
Acetaminophen	104	110	P/P	60 - 160
Acetamiprid	107	104	P/P	50 - 150
Afidopyropen	84.7	86.3	P/P	50 - 150
Bentazon	109	106	P/P	50 - 160
Benzovindiflupyr	107	106	P/P	50 - 160
Carbamazepine	99.6	100	P/P	60 - 150
Clothianidin	102	107	P/P	60 - 150
Dinotefuran	115	109	P/P	50 - 150
Diuron	107	106	P/P	60 - 160
Fenuron	108	104	P/P	60 - 150
Fluridone	110	125	P/P	60 - 160
Hydrocodone	112	106	P/P	60 - 150
Ibuprofen	95.5	91.6	P/P	50 - 160
Imazapyr	89.6	101	P/P	50 - 160
Imidacloprid	101	90.2	P/P	60 - 150
Linuron	101	107	P/P	60 - 150
Mandestrobin	104	99.6	P/P	50 - 150
MCPP	100	92.7	P/P	50 - 150
Naproxen	65.4	84.0	P/P	50 - 160
Primidone	92.0	94.7	P/P	60 - 150
Pyraclostrobin	98.1	99.8	P/P	60 - 150
Thiamethoxam	104	108	P/P	50 - 150
Tolfenpyrad	97.1	97.2	P/P	60 - 150
Triclopyr	93.4	101	P/P	50 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A103973

Included Lab Sample IDs: 2229658, 2229659, 2229660, 2229661, 2229662, 2229663

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	102	102	P/P	90 - 110
Barium	103	98.3	P/P	95 - 105
Calcium	102	101	P/P	95 - 105
Calcium	99.8	101	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Iron	102	101	P/P	95 - 105
Magnesium	101	100	P/P	95 - 105
Magnesium	99.9	100	P/P	90 - 110
Manganese	100	98.8	P/P	95 - 105
Manganese	98.5	98.0	P/P	90 - 110
Potassium	100	100	P/P	90 - 110
Potassium	102	101	P/P	95 - 105
Sodium	102	101	P/P	95 - 105
Sodium	99.8	101	P/P	90 - 110
Zinc	97.1	97.0	P/P	90 - 110
Zinc	97.7	92.6	P/P	95 - 105

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A103974

Included Lab Sample IDs: 2229625, 2229628, 2229631, 2229634

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.3	98.3	P/P	90 - 110
Sulfate	97.3	96.7	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A103978

Included Lab Sample IDs: 2229648, 2229650

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	60.2	84.3	P/P	60 - 160
AMPA	81.7	84.0	P/P	60 - 160
Endothall	99.9	121	P/P	60 - 160
Glufosinate	103	79.2	P/P	60 - 160
Glyphosate	141	151	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103979

Included Lab Sample IDs: 2229629, 2229635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	104	P/P	90 - 110
NO2NO3-N	104	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A103987

Included Lab Sample IDs: 2229626

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.0	99.2	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A103989

Included Lab Sample IDs: 2229625, 2229628, 2229631, 2229634

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	97.7	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A103989

Included Lab Sample IDs: 2229625, 2229628, 2229631, 2229634

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A103997

Included Lab Sample IDs: 2229658, 2229659, 2229660, 2229661, 2229662, 2229663

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.8	97.1	P/P	90 - 110
Aluminum	97.0	95.8	P/P	90 - 110
Aluminum	97.3	97.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A103997

Included Lab Sample IDs: 2229658, 2229659, 2229660, 2229661, 2229662, 2229663

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	96.1	96.6	P/P	90 - 110
Antimony	96.6	96.7	P/P	90 - 110
Antimony	96.7	97.3	P/P	90 - 110
Arsenic	99.1	101	P/P	90 - 110
Arsenic	99.2	99.1	P/P	90 - 110
Arsenic	99.9	99.2	P/P	90 - 110
Beryllium	92.5	92.7	P/P	90 - 110
Beryllium	93.4	94.8	P/P	90 - 110
Beryllium	94.8	92.5	P/P	90 - 110
Cadmium	97.3	97.7	P/P	90 - 110
Cadmium	97.7	98.5	P/P	90 - 110
Cadmium	98.5	98.9	P/P	90 - 110
Chromium	98.4	98.7	P/P	90 - 110
Chromium	98.7	98.7	P/P	90 - 110
Chromium	98.7	100	P/P	90 - 110
Copper	98.2	97.0	P/P	90 - 110
Lead	100	101	P/P	90 - 110
Lead	101	101	P/P	90 - 110
Lead	99.6	100	P/P	90 - 110
Nickel	98.0	100	P/P	90 - 110
Nickel	99.2	98.0	P/P	90 - 110
Nickel	99.6	99.2	P/P	90 - 110
Selenium	96.3	96.4	P/P	90 - 110
Selenium	96.4	97.2	P/P	90 - 110
Selenium	97.2	98.3	P/P	90 - 110
Silver	98.0	98.6	P/P	90 - 110
Silver	98.2	98.4	P/P	90 - 110
Silver	98.4	98.0	P/P	90 - 110
Thallium	106	107	P/P	90 - 110
Thallium	106	106	P/P	90 - 110
Thallium	107	106	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A104027

Included Lab Sample IDs: 2229658, 2229659, 2229660, 2229661, 2229662, 2229663

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	94.7	96.5	P/P	90 - 110
Boron	94.9	94.7	P/P	90 - 110
Copper	94.6	95.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A104054

Included Lab Sample IDs: 2229629, 2229632, 2229635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	97.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A104061

Included Lab Sample IDs: 2229626, 2229629, 2229632, 2229635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	107	106	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A104063

Included Lab Sample IDs: 2229653, 2229654, 2229655

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.9		P	80 - 120
Dieldrin	94.8		P	80 - 120
Kepone	99.4		P	80 - 120

Reference Method: EPA 8321B

Run ID: A104071

Included Lab Sample IDs: 2229648, 2229650

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	100	107	P/P	60 - 160
Sucralose	107	108	P/P	60 - 160

Reference Method: EPA 8276

Run ID: A104073

Included Lab Sample IDs: 2229651, 2229653, 2229654, 2229655, 2229656

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	104		P	80 - 120
Chlordane	100		P	80 - 120
Toxaphene	104		P	80 - 120
Toxaphene	94.2		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A104113

Included Lab Sample IDs: 2229626, 2229629, 2229632, 2229635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.4	94.8	P/P	90 - 110
Organic Carbon	94.8	94.6	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A104117

Included Lab Sample IDs: 2229653, 2229654, 2229655, 2229656

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	93.8		P	80 - 120
Alpha-BHC	100		P	80 - 120
Alpha-Chlordane	96.3		P	80 - 120
Beta-BHC	107		P	80 - 120
Beta-Cyfluthrin	86.0		P	80 - 120
Bifenthrin	98.0		P	80 - 120
Carbophenothion	106		P	80 - 120
Chlorothalonil	98.2		P	80 - 120
Cis-Nonachlor	95.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A104117

Included Lab Sample IDs: 2229653, 2229654, 2229655, 2229656

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cypermethrin	93.6		P	80 - 120
Dacthal	97.5		P	80 - 120
DDD-p,p'	102		P	80 - 120
DDE-p,p'	97.9		P	80 - 120
DDT-p,p'	99.8		P	80 - 120
Delta-BHC	110		P	80 - 120
Deltamethrin	97.4		P	80 - 120
Dichlobenil	102		P	80 - 120
Dicofol	96.8		P	80 - 120
Dieldrin	94.9		P	80 - 120
Endosulfan I	92.7		P	80 - 120
Endosulfan II	96.4		P	80 - 120
Endosulfan Sulfate	103		P	80 - 120
Endrin	96.8		P	80 - 120
Endrin Aldehyde	102		P	80 - 120
Endrin Ketone	102		P	80 - 120
Esfenvalerate	93.0		P	80 - 120
Ethalfuralin	97.5		P	80 - 120
Fenpropathrin	93.8		P	80 - 120
Gamma-BHC	104		P	80 - 120
Gamma-Chlordane	95.2		P	80 - 120
Heptachlor	93.2		P	80 - 120
Heptachlor Epoxide	97.2		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Lambda-Cyhalothrin	90.6		P	80 - 120
Methoxychlor	98.3		P	80 - 120
MGK-264	98.4		P	80 - 120
Mirex	99.6		P	80 - 120
Permethrin	90.0		P	80 - 120
Phenothrin	92.6		P	80 - 120
Piperonyl Butoxide	101		P	80 - 120
Prallethrin	95.1		P	80 - 120
Tau-Fluvalinate	98.8		P	80 - 120
Tetramethrin	98.7		P	80 - 120
Trans-Nonachlor	95.9		P	80 - 120
Triclosan Methyl	97.5		P	80 - 120
Trifluralin	98.3		P	80 - 120

Reference Method: EPA 8270E

Run ID: A104128

Included Lab Sample IDs: 2229652, 2229657

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	100		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine	98.6		P	80 - 120
Atrazine Desethyl	98.4		P	80 - 120
Azinphos Methyl	121*		F	80 - 120
Azoxystrobin	90.3		P	80 - 120
Bromacil	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A104128

Included Lab Sample IDs: 2229652, 2229657

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Butylate	93.8		P	80 - 120
Caffeine	93.9		P	70 - 120
Carbophenothion	99.5		P	80 - 120
Carfentrazone Ethyl	106		P	80 - 120
Chlorpyrifos Ethyl	97.3		P	80 - 120
Chlorpyrifos Methyl	96.3		P	80 - 120
Cyanazine	103		P	80 - 120
Demeton	94.6		P	80 - 120
Diazinon	100		P	80 - 120
Difenoconazole	95.3		P	80 - 120
Dimethenamid	102		P	80 - 120
Disulfoton	94.3		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	97.5		P	80 - 120
Ethion	96.7		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	93.2		P	80 - 120
Fenbuconazole	94.6		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	95.2		P	80 - 120
Fipronil Sulfone	98.2		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	94.5		P	80 - 120
Flutolanil	98.7		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	91.9		P	80 - 120
Hexazinone	99.5		P	80 - 120
Imazalil	103		P	80 - 120
Iprodione	102		P	80 - 120
Malathion	97.0		P	80 - 120
Metaxyl	100		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	99.6		P	80 - 120
Mevinphos	100		P	80 - 120
Molinate	96.5		P	80 - 120
Myclobutanil	97.6		P	80 - 120
Naled	94.9		P	80 - 120
Norflurazon	99.3		P	80 - 120
Oxadiazon	106		P	80 - 120
Oxyfluorfen	97.2		P	80 - 120
Parathion Ethyl	98.1		P	80 - 120
Parathion Methyl	94.3		P	80 - 120
Pendimethalin	98.2		P	80 - 120
Phorate	97.8		P	80 - 120
Prodiamine	104		P	80 - 120
Prometon	98.8		P	80 - 120
Prometryn	93.9		P	80 - 120
Pronamide	94.8		P	80 - 120
Propiconazole	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A104128

Included Lab Sample IDs: 2229652, 2229657

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyriproxyfen	115		P	80 - 120
Simazine	108		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	104		P	80 - 120
Terbufos	97.6		P	80 - 120
Terbutylazine	100		P	80 - 120

Reference Method: EPA 8270E

Run ID: A104166

Included Lab Sample IDs: 2229657

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	97.2		P	80 - 120

Reference Method: EPA 8270E

Run ID: A104214

Included Lab Sample IDs: 2229651

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	95.7		P	80 - 120
Alpha-BHC	99.9		P	80 - 120
Alpha-Chlordane	96.8		P	80 - 120
Beta-BHC	98.5		P	80 - 120
Beta-Cyfluthrin	93.7		P	80 - 120
Bifenthrin	96.3		P	80 - 120
Chlorothalonil	104		P	80 - 120
Cis-Nonachlor	94.1		P	80 - 120
Cypermethrin	93.3		P	80 - 120
Dacthal	97.2		P	80 - 120
DDD-p,p'	97.7		P	80 - 120
DDE-p,p'	98.0		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	103		P	80 - 120
Deltamethrin	97.1		P	80 - 120
Dichlobenil	99.5		P	80 - 120
Dicofol	93.1		P	80 - 120
Dieldrin	98.9		P	80 - 120
Endosulfan I	96.7		P	80 - 120
Endosulfan II	106		P	80 - 120
Endosulfan Sulfate	97.5		P	80 - 120
Endrin	92.1		P	80 - 120
Endrin Aldehyde	107		P	80 - 120
Endrin Ketone	95.4		P	80 - 120
Esfenvalerate	92.4		P	80 - 120
Ethalfuralin	96.8		P	80 - 120
Fenpropathrin	94.9		P	80 - 120
Gamma-BHC	97.7		P	80 - 120
Gamma-Chlordane	96.8		P	80 - 120
Heptachlor	93.1		P	80 - 120
Heptachlor Epoxide	96.8		P	80 - 120
Hexachlorobenzene	99.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A104214
Included Lab Sample IDs: 2229651

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lambda-Cyhalothrin	92.6		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	97.5		P	80 - 120
Mirex	99.1		P	80 - 120
Permethrin	89.9		P	80 - 120
Phenothrin	88.8		P	80 - 120
Piperonyl Butoxide	98.7		P	80 - 120
Prallethrin	95.2		P	80 - 120
Tau-Fluvalinate	97.9		P	80 - 120
Tetramethrin	100		P	80 - 120
Trans-Nonachlor	95.9		P	80 - 120
Triclosan Methyl	98.6		P	80 - 120
Trifluralin	97.9		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							4.45	
EPA 200.7 Rev. 4.4	Barium	99.8		101	101	104			0.122
	Calcium	104		106	105	105			0.856
	Iron	103		107	105	103			1.09
	Magnesium	102		105	104	102			0.780
	Manganese	99.3		99.9	99.8	101			0.172
	Potassium	103		108	107	99.4			0.757
	Sodium	105		105	104				0.457
	Zinc	94.2		96.4	95.8	100			0.553
EPA 200.8 Rev. 5.4	Aluminum	93.5		93.3	91.8	91.2			1.53
	Antimony	98.8		98.1	98.1	98.1			0.0703
	Arsenic	99.0		98.2	97.1	96.4			1.15
	Beryllium	88.7		89.0	90.7	88.8			1.77
	Boron	91.5		88.5	91.1	92.0			2.57
	Cadmium	98.5		98.4	98.0	97.8			0.395
	Chromium	94.0		94.9	94.8	97.7			0.159
	Copper	96.2		91.0	94.1	94.4			2.12
	Lead	100		100	101	101			0.545
	Nickel	95.9		96.6	97.1	94.6			0.512
	Selenium	95.5		86.7	85.6	93.5			1.28
	Silver	101		99.0	99.4	97.9			1.12
	Thallium	103		104	106	105			1.64
EPA 300.0 Rev. 2.1	Chloride	98.2		98.8	98.6			1.85	
	Sulfate	96.7		95.2	96.7			1.52	
EPA 350.1 Rev. 2.0	Ammonia-N	96.4		93.2	95.6				1.91
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.6		107	115				5.11
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100		100	100				0.0
	NO ₂ NO ₃ -N	102		100	100				0.499
	NO ₂ NO ₃ -N	104		104	104				0.482
EPA 365.1 Rev. 2.0	Total-P	109		108	106				1.32
	Total-P	105		103	104				1.39
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101		103	103				0.388
EPA 8270E	Acetochlor	85.7	89.4	81.7	84.4	4.21			3.16
	Alachlor	85.1	81.9	77.9	85.3	3.76			9.01
	Aldrin	28.1	28.6	35.2	31.9	1.52			9.72
	Aldrin	27.2	30.3	29.6	39.8	11.1			29.5
	Alpha-BHC	74.9	86.8	77.2	83.7	14.7			8.08
	Alpha-Chlordane	65.6	77.9	69.1	82.0	17.2			17.0
	Ametryn	93.1	125			29.0			2.93
	Atrazine	85.6	85.9			0.369			9.81
	Atrazine Desethyl	73.3	71.1			3.03			3.95
	Azinphos Methyl	106	94.5	81.3	76.0	11.3			6.78
	Azoxystrobin	221	154	196	217	35.5			10.0
	Beta-BHC	91.9	104	91.1	101	12.5			10.1
	Beta-Cyfluthrin	52.1	65.6	63.7	72.3	22.9			12.6
	Bifenthrin	51.3	66.6	67.1	74.4	25.9			10.3
	Bromacil	89.2	83.6	146	143	6.48			2.24
	Butylate	55.5	54.8	52.8	44.6	1.20			16.8
	Caffeine	93.2	81.5	87.1	84.0	13.4			3.61
	Carbophenothion	73.1	58.6	61.5	56.4	22.1			8.52
	Carbophenothion	34.9	42.0	54.6	74.7	18.3			31.1
	Carfentrazone Ethyl	91.4	75.8	68.9	72.2	18.6			4.65
	Chlorothalonil	68.0	80.0	65.9	80.1	16.2			19.4
	Chlorpyrifos Ethyl	73.6	70.3	58.6	49.9	4.61			12.8

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Chlorpyrifos Methyl	81.1	79.0	76.2	74.3	2.59	2.59
	Cis-Nonachlor	66.8	80.5	71.4	86.6	18.6	19.2
	Cyanazine	147	142	135	119	3.64	13.1
	Cypermethrin	55.3	71.7	69.2	79.9	25.8	14.2
	Dacthal	84.0	97.0	83.9	96.4	14.4	13.9
	DDD-p,p'	72.4	89.3	77.7	94.4	20.9	19.3
	DDE-p,p'	61.6	74.9	66.3	78.6	19.4	16.9
	DDT-p,p'	58.4	72.3	64.3	74.9	21.3	15.2
	Delta-BHC	104	118	108	115	13.0	6.24
	Deltamethrin	64.5	75.2	75.1	84.7	15.4	11.9
	Demeton	74.3	76.8	68.5	90.8	3.28	28.1
	Diazinon	89.4	95.9	90.6	90.2	6.97	0.464
	Dichlobenil	48.0	57.5	45.7	49.3	18.0	7.50
	Dicofol	79.3	94.7	85.1	95.0	17.7	11.0
	Dieldrin	67.4	61.7	57.4	53.7	8.93	5.45
	Dieldrin	75.2	86.0	76.0	88.6	13.5	15.3
	Difenoconazole	177	133	156	143	28.0	8.71
	Dimethenamid	90.7	80.1	75.2	82.8	12.3	9.61
	Disulfoton	68.3	67.9	69.4	68.5	0.547	1.40
	Dithiopyr	83.7	81.3	63.6	56.9	2.96	11.1
	Endosulfan I	74.4	84.1	79.2	91.9	12.2	14.9
	Endosulfan II	79.7	100	83.5	99.3	22.7	17.3
	Endosulfan Sulfate	79.6	98.9	84.0	95.0	21.6	12.3
	Endrin	76.5	91.4	76.3	91.7	17.8	18.3
	Endrin Aldehyde	83.2	89.2	82.4	93.0	6.99	12.0
	Endrin Ketone	80.9	100	81.9	93.9	21.3	13.6
	EPTC	59.2	51.7	45.2	51.9	13.5	13.9
	Esfenvalerate	56.6	69.3	69.4	78.4	20.2	12.1
	Ethalfuralin	61.1	75.1	64.7	73.9	20.5	13.3
	Ethion	65.0	44.5	35.8	30.6	37.3	15.6
	Ethoprop	78.3	81.5	84.2	87.4	3.95	3.81
	Fenamiphos	91.9	87.2	62.1	53.0	5.28	15.8
	Fenbuconazole	109	95.1	99.9	103	14.0	3.30
	Fenpropathrin	74.7	93.7	82.8	92.5	22.6	11.1
	Fipronil	96.5	93.8	87.4	88.5	2.80	1.24
	Fipronil Desulfinyl	86.7	86.2	77.1	75.6	0.587	2.09
	Fipronil Sulfide	80.0	76.4	73.1	71.5	4.62	2.16
	Fipronil Sulfone	85.9	69.7	73.2	69.4	20.9	5.39
	Fluazifop-P-butyl	86.1	76.9	73.2	67.1	11.2	8.77
	Fludioxonil	82.0	74.5	75.2	75.0	9.59	0.220
	Flumioxazin	223	185	200	186	19.0	7.35
	Flutolanil	92.1	80.2	81.8	75.6	13.8	7.26
	Fluxapyroxad	73.9	56.7	59.0	58.8	26.3	0.298
	Fonofos	70.9	68.7	65.0	60.2	3.08	7.66
	Gamma-BHC	85.5	95.6	84.8	93.7	11.1	9.96
	Gamma-Chlordane	61.3	73.4	65.2	77.8	17.9	17.6
	Heptachlor	52.0	60.3	57.6	65.2	14.7	12.3
	Heptachlor Epoxide	74.3	85.2	76.0	87.2	13.7	13.8
	Hexachlorobenzene	46.9	57.6	54.6	59.5	20.5	8.53
	Hexazinone	80.4	74.0			8.30	5.06
	Imazalil	62.1	63.1	114	104	1.59	9.21
	Iprodione	89.8	75.7	72.2	71.1	17.0	1.63
	Kepone	106	106	113	101	0.405	11.0
	Lambda-Cyhalothrin	50.8	65.8	65.3	73.7	25.7	12.1

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8270E	Malathion	97.5	91.2	97.6	96.4	6.68		1.26
	Metalaxyl	82.0	81.5	76.0	77.7	0.526		1.73
	Methoxychlor	72.0	87.1	75.7	86.2	19.0		13.0
	Metolachlor	78.8	76.9	79.4	85.9	2.52		3.84
	Metribuzin	89.6	88.2	83.9	85.6	1.61		1.37
	Mevinphos	97.0	99.2	110	105	2.26		4.85
	MGK-264	46.7	51.8	38.9	63.7	10.4		48.3
	Mirex	44.0	58.0	53.8	62.3	27.5		14.6
	Molinate	64.8	62.7	62.6	57.3	3.30		8.79
	Myclobutanil	80.0	70.0	67.7	63.3	13.3		6.68
	Naled	77.3	70.0	68.9	73.5	9.89		6.44
	Norflurazon	81.4	68.1	119	123	17.9		2.29
	Oxadiazon	79.4	69.4	67.1	69.3	13.5		3.18
	Oxyfluorfen	90.0	84.2	83.3	83.6	6.65		0.345
	Parathion Ethyl	87.5	79.3	84.7	84.5	9.78		0.182
	Parathion Methyl	101	101	107	106	0.777		1.54
	Pendimethalin	73.1	68.9	66.1	67.2	5.92		0.939
	Permethrin	50.3	64.8	61.7	70.5	25.1		13.2
	Phenothrin	28.9	36.5	35.0	48.4	23.3		32.0
	Phorate	63.9	68.6	73.6	69.2	7.00		6.21
	Piperonyl Butoxide	83.3	100	88.3	99.8	18.4		12.2
	Prallethrin	45.8	52.6	41.2	61.0	13.8		38.7
	Prodiamine	62.2	65.0	64.2	65.8	4.40		2.41
	Prometon	92.8	88.6	95.4	89.5	4.69		6.30
	Prometryn	93.8	97.3	87.7	90.5	3.64		3.12
	Pronamide	92.6	88.8	83.8	82.0	4.23		1.69
	Propiconazole	80.0	74.5	72.2	73.3	7.06		0.965
	Pyriproxyfen	81.2	61.9	65.8	78.9	26.9		18.1
	Simazine	93.1	90.8	157	151	2.56		4.22
	Sulfentrazone	78.8	56.8	64.9	72.0	32.5		10.4
	Tau-Fluvalinate	58.4	74.3	76.6	86.7	23.9		12.3
	Tebuconazole	34.1	23.5	19.5	22.4	36.8		14.1
	Terbufos	77.3	74.8	79.9	78.8	3.31		1.35
	Terbuthylazine	83.6	86.8	90.6	79.5	3.73		13.0
	Tetramethrin	62.6	61.1	68.4	85.4	2.48		22.1
	Trans-Nonachlor	62.5	74.2	66.9	80.1	17.1		17.9
	Triclosan Methyl	79.0	94.1	82.7	98.4	17.4		17.3
	Trifluralin	59.2	72.7	63.4	73.1	20.4		14.3
EPA 8276	Chlordane	98.2	85.2	70.1	67.6	14.2		3.23
	Toxaphene	114	103	96.1	101	9.96		4.69
EPA 8321B	2,4-D	107		101	118			9.49
	2,4,5-T	90.3		93.4	95.3			2.09
	3-Hydroxycarbofuran	90.6		86.7	80.2			7.77
	Acesulfame K	70.7		141	165			13.2
	Acetaminophen	87.2		100	126			13.7
	Acetamiprid	89.1		79.0	83.1			5.14
	Afidopyrophen	68.4		67.2	68.3			1.64
	Aldicarb	72.6		70.3	62.8			11.3
	Aldicarb Sulfone	87.6		90.7	86.6			4.65
	Aldicarb Sulfoxide	89.1		23.8	24.7			3.86
	AMPA	92.7		118	116			1.65
	Bentazon	83.9						7.56
	Benzovindiflupyr	89.3		80.2	88.5			9.79
	Carbamazepine	95.9		73.6	81.6			9.68

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
			LCS	SMP	MS	
EPA 8321B	Carbaryl	64.2	47.3	46.0		2.65
	Carbofuran	77.2	55.5	48.8		12.7
	Clothianidin	95.9	95.5	101		5.83
	Dinotefuran	88.4	112	122		8.45
	Diuron	71.1	41.9	51.6		16.8
	Endothall	104	148	113		27.2
	Fenuron	104	76.7	80.2		4.42
	Fluridone	93.2	69.6	64.0		4.91
	Glufosinate	132	118	130		9.09
	Glyphosate	127	39.6	54.5		17.2
	Hydrocodone	98.7	90.4	103		13.0
	Ibuprofen	83.2	77.0	87.8		13.1
	Imazapyr	90.3				12.0
	Imidacloprid	93.9	132	138		3.44
	Linuron	78.5	53.8	63.3		16.3
	Mandestrobin	85.6	73.1	80.1		9.19
	MCPP	115	102	103		0.679
	Methiocarb	74.1	60.1	59.5		0.869
	Methomyl	87.9				4.74
	Naproxen	52.1	62.5	81.4		26.2
	Oxamyl	98.2	83.4	76.1		9.11
	Primidone	96.1	81.8	97.6		14.9
	Propoxur	74.2	54.8	48.1		13.1
	Pyraclostrobin	81.7	77.1	85.8		10.6
	Sucralose	99.7	123	120		1.86
	Thiamethoxam	102	133	147		10.3
	Tolfenpyrad	55.3	51.5	58.3		12.4
	Triclopyr	97.6	97.7	102		3.94
SM 2120 B-2011	Color (true)	102			0.138	
	Color (true)	97.5			0.398	
SM 2320 B-2011	Total Alkalinity	98.4			1.47	
SM 2540 C-2011	TDS				1.73	
	TDS				6.40	
SM 4500 F-C-2011	Fluoride	98.2	99.8	99.8		0.0
SM 5310 B-2011	Organic Carbon	94.0	94.1	94.7		0.479

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2229625, 2229628, 2229631, 2229634
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2229658, 2229659, 2229660, 2229661, 2229662, 2229663
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2229658, 2229659, 2229660, 2229661, 2229662, 2229663
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2229625, 2229628, 2229631, 2229634
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2229625, 2229628, 2229631, 2229634
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2229626, 2229629, 2229632, 2229635
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2229626, 2229629, 2229632, 2229635
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2229626, 2229629, 2229632, 2229635
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2229626, 2229629, 2229632, 2229635
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2229627, 2229630, 2229633, 2229636
EPA 8270E	Dieldrin (ultra low level) in water matrices by GC/MS/MS	2229653, 2229654, 2229655

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2229651, 2229653, 2229654, 2229655, 2229656
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2229652, 2229657
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2229651, 2229653, 2229654, 2229655, 2229656
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2229647, 2229649
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2229648, 2229650
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2229648, 2229650
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2229625, 2229628, 2229631, 2229634
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2229625, 2229628, 2229631, 2229634
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2229658, 2229659, 2229660, 2229661, 2229662, 2229663
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2229625, 2229628, 2229631, 2229634
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2229625, 2229628, 2229631, 2229634
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2229625, 2229628, 2229631, 2229634
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2229626, 2229629, 2229632, 2229635

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	03/05/2021			03/05/2021 14:57	Yen Ta	2229625, 2229628, 2229631, 2229634
EPA 200.7 Rev. 4.4	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/09/2021 12:18	Betina Topolski	2229663
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/09/2021 15:25	Betina Topolski	2229658
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/09/2021 15:33	Betina Topolski	2229659
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/09/2021 15:54	Betina Topolski	2229660
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/09/2021 16:02	Betina Topolski	2229661
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/09/2021 16:10	Betina Topolski	2229662
EPA 200.8 Rev. 5.4	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/10/2021 17:58	McKinley C Carter	2229663
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/10/2021 20:50	McKinley C Carter	2229659
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/10/2021 21:47	McKinley C Carter	2229658
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/10/2021 21:56	McKinley C Carter	2229660
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/10/2021 22:06	McKinley C Carter	2229661
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/10/2021 22:15	McKinley C Carter	2229662
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/11/2021 16:47	McKinley C Carter	2229663
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/11/2021 17:58	McKinley C Carter	2229658
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/11/2021 18:04	McKinley C Carter	2229660
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/11/2021 18:09	McKinley C Carter	2229661
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/11/2021 18:15	McKinley C Carter	2229662
	03/05/2021	03/08/2021 14:10	Elliott D. Healy	03/11/2021 18:20	McKinley C Carter	2229659
EPA 300.0 Rev. 2.1	03/05/2021			03/10/2021 17:06	Lipi Saha	2229625
	03/05/2021			03/10/2021 17:18	Lipi Saha	2229628
	03/05/2021			03/10/2021 17:30	Lipi Saha	2229631
	03/05/2021			03/10/2021 17:42	Lipi Saha	2229634
EPA 350.1 Rev. 2.0	03/05/2021			03/08/2021 17:24	Ping Hua	2229632
	03/05/2021			03/08/2021 17:35	Ping Hua	2229626
	03/05/2021			03/08/2021 17:36	Ping Hua	2229629
	03/05/2021			03/08/2021 17:39	Ping Hua	2229635
EPA 351.2 Rev. 2.0	03/05/2021	03/11/2021 12:20	Benjamin T. Nordmann	03/15/2021 10:55	Virginia P. Brown	2229626
	03/05/2021	03/11/2021 12:20	Benjamin T. Nordmann	03/15/2021 10:56	Virginia P. Brown	2229629
	03/05/2021	03/11/2021 12:20	Benjamin T. Nordmann	03/15/2021 10:58	Virginia P. Brown	2229632
	03/05/2021	03/11/2021 12:20	Benjamin T. Nordmann	03/15/2021 11:00	Virginia P. Brown	2229635
EPA 353.2 Rev. 2.0	03/05/2021			03/08/2021 12:28	Beverly Y. Sanders	2229632
	03/05/2021			03/08/2021 12:29	Beverly Y. Sanders	2229626
	03/05/2021			03/10/2021 09:16	Beverly Y. Sanders	2229629
	03/05/2021			03/10/2021 09:29	Beverly Y. Sanders	2229635
EPA 365.1 Rev. 2.0	03/05/2021	03/09/2021 11:56	Yen Ta	03/10/2021 14:00	Shengyu Ding	2229626
	03/05/2021	03/11/2021 12:40	Yen Ta	03/12/2021 15:19	Shengyu Ding	2229629
	03/05/2021	03/11/2021 12:40	Yen Ta	03/12/2021 15:20	Shengyu Ding	2229632
	03/05/2021	03/11/2021 12:40	Yen Ta	03/12/2021 15:21	Shengyu Ding	2229635
EPA 365.1 Rev. 2.0 dissolved	03/05/2021			03/05/2021 14:55	Patrick M. Roche	2229627

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0 dissolved	03/05/2021			03/05/2021 15:03	Patrick M. Roche	2229630, 2229633
	03/05/2021			03/05/2021 15:04	Patrick M. Roche	2229636
EPA 8270E	03/05/2021	03/08/2021 08:00	Fe-Val Siddell	03/16/2021 19:16	Vandana T. Nagar	2229652
	03/05/2021	03/08/2021 08:00	Fe-Val Siddell	03/16/2021 19:41	Vandana T. Nagar	2229657
	03/05/2021	03/08/2021 08:00	Fe-Val Siddell	03/19/2021 12:53	Vandana T. Nagar	2229657
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/11/2021 22:32	Arthur Maknenko	2229653
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/11/2021 23:15	Arthur Maknenko	2229654
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/11/2021 23:36	Arthur Maknenko	2229655
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/15/2021 19:07	Michael Poppell	2229653
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/15/2021 19:39	Michael Poppell	2229654
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/15/2021 20:11	Michael Poppell	2229655
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/15/2021 20:43	Michael Poppell	2229656
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/22/2021 19:53	Michael Poppell	2229651
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/13/2021 01:07	Julie Wi	2229653
EPA 8276	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/13/2021 02:58	Julie Wi	2229651
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/13/2021 03:53	Julie Wi	2229654
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/13/2021 05:44	Julie Wi	2229655
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/13/2021 06:39	Julie Wi	2229656
	03/05/2021	03/10/2021 08:00	Fe-Val Siddell	03/13/2021 06:39	Julie Wi	2229656
EPA 8321B	03/05/2021	03/05/2021 13:00	Hoor Shaik	03/07/2021 21:57	Juyoung Kim	2229647
	03/05/2021	03/05/2021 13:00	Hoor Shaik	03/07/2021 22:32	Juyoung Kim	2229649
	03/05/2021	03/09/2021 10:00	Hoor Shaik	03/10/2021 01:54	Juyoung Kim	2229648
	03/05/2021	03/09/2021 10:00	Hoor Shaik	03/10/2021 02:28	Juyoung Kim	2229650
	03/05/2021	03/09/2021 10:00	Rebecca Ware	03/09/2021 13:16	Rebecca Ware	2229648
	03/05/2021	03/09/2021 10:00	Rebecca Ware	03/09/2021 13:30	Rebecca Ware	2229650
	03/05/2021	03/09/2021 10:00	Rebecca Ware	03/12/2021 18:32	Rebecca Ware	2229650
	03/05/2021	03/09/2021 10:00	Rebecca Ware	03/12/2021 20:29	Rebecca Ware	2229648
SM 2120 B-2011	03/05/2021			03/05/2021 15:50	Benjamin T. Nordmann	2229628
	03/05/2021			03/05/2021 15:51	Benjamin T. Nordmann	2229631
	03/05/2021			03/05/2021 15:52	Benjamin T. Nordmann	2229634
	03/05/2021			03/05/2021 15:56	Benjamin T. Nordmann	2229625
SM 2320 B-2011	03/05/2021			03/10/2021 04:30	Dale L. Simmons	2229625
	03/05/2021			03/10/2021 04:42	Dale L. Simmons	2229628
	03/05/2021			03/10/2021 04:54	Dale L. Simmons	2229631
	03/05/2021			03/10/2021 05:03	Dale L. Simmons	2229634
SM 2340B	03/05/2021			03/09/2021 12:18	Betina Topolski	2229663
	03/05/2021			03/09/2021 15:25	Betina Topolski	2229658
	03/05/2021			03/09/2021 15:33	Betina Topolski	2229659
	03/05/2021			03/09/2021 15:54	Betina Topolski	2229660
	03/05/2021			03/09/2021 16:02	Betina Topolski	2229661
	03/05/2021			03/09/2021 16:10	Betina Topolski	2229662

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2540 C-2011	03/05/2021			03/08/2021 14:25	Yijie Li	2229625, 2229628, 2229631, 2229634
SM 2540 D-2011	03/05/2021			03/08/2021 14:25	Yijie Li	2229625, 2229628, 2229631, 2229634
SM 4500 F-C-2011	03/05/2021			03/10/2021 04:30	Dale L. Simmons	2229625
	03/05/2021			03/10/2021 04:42	Dale L. Simmons	2229628
	03/05/2021			03/10/2021 04:54	Dale L. Simmons	2229631
	03/05/2021			03/10/2021 05:03	Dale L. Simmons	2229634
SM 5310 B-2011	03/05/2021			03/17/2021 04:12	Madeline Gruver	2229626
	03/05/2021			03/17/2021 04:21	Madeline Gruver	2229629
	03/05/2021			03/17/2021 04:30	Madeline Gruver	2229632
	03/05/2021			03/17/2021 04:59	Madeline Gruver	2229635